The Twelve Steps and Adolescent **Recovery: A Concise Review**

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ABSTRACT: Recovery and long-term remission are the goals of treatment for substance use disorders, yet the majority of treated adolescents never stop using or resume using substances quickly after treatment. Thus, continuing care or recovery support services are common posttreatment recommendations for this group. Almost half of people who resolved significant substance use problems did so through participation in 12-step programs like Alcoholics Anonymous or Narcotics Anonymous. These recovery support programs are available online and in communities around the world. Yet <2% of these programs' members are under 21 years old. To help clinicians understand the 12-step explanatory model and facilitate clinical decision making on whether or when to refer individuals to these groups, this article summarizes the 12-step philosophy and practices and provides a concise review of research on adolescents' involvement in 12-step groups, including gualitative work that illuminates adolescents' reasons for resisting or engaging in 12-step practices.

KEYWORDS: adolescent, 12-step, substance use disorder, peer recovery support

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Introduction

In 2016, about 1.1 million American adolescents needed treatment for a substance use disorder (SUD).¹⁻⁶ Adolescents with heavy use of alcohol and/or marijuana perform more poorly than non-using controls on tasks involving psychomotor speed, memory, attention, and cognitive control.⁷ Because their brains are undergoing rapid development, adolescents with untreated or undertreated SUDs are at risk for developing chronic addiction.8,9 A variety of psychosocial treatments exist for treating adolescents with SUD. Treatments with the most empirical support include family-based approaches, motivational enhancement (MET), contingency management, cognitive behavioral therapy (CBT), and 12-step facilitation.^{10,11} Most programs provide a combination of approaches.8 Completing any evidence-based treatment is better than no treatment and results in reductions in substance use.^{8,12} The goals of adolescent SUD treatment are remission and longterm recovery,¹³ yet the majority of treated adolescents never stop using or resume using substances quickly after leaving treatment.12,14 Thus, it is common practice to recommend continuing care or recovery support services that provide ongoing motivation and social support for sobriety to extend the benefits of SUD treatment.^{4,12} One in ten Americans report having resolved a significant problem with alcohol or other drugs (AODs).¹⁵ Though there are many pathways to recovery, approximately 45% report resolving their problem through participation in 12-step programs.¹⁵ Thus, 12-step programs are widely recommended for adolescents as an adjunct to professional treatment services.^{16,17} To facilitate clinical decision making on whether or when to refer individuals to these groups, this article summarizes the 12-step philosophy and practices and provides a review of research on adolescents' involvement in 12-step groups.

Twelve-step philosophy and practices

An understanding of 12-step philosophy and practices may help clinicians determine which of their adolescent clients may benefit from referral to these programs. Twelve-step programs are the most commonly sought resources for people with AOD problems.¹⁸ Their program for recovery is represented by the 12 steps (Table 1).¹⁹ A variety of 12-step programs exist for people who struggle with addiction and their families (eg, Cocaine Anonymous, Marijuana Anonymous, Gamblers Anonymous, Al-Anon, Alateen, etc.), but the oldest and most readily available are Alcoholics Anonymous (AA) and Narcotics Anonymous (NA). All 12-step programs emerged from AA, which has been in existence for more than 80 years.^{18,20} Twelve step programs are one source of recovery capital (the collective resources an individual can access to support their recovery from SUD).^{21,22} These community-based recovery support programs are peer-led, non-professional fellowships whose primary purpose is mutual help.^{18,23-25} Together, AA and NA claim to have helped millions of people recover from AOD use problems.^{13,14} In 1951, AA received the prestigious Lasker Award from the American Public Health Association "in recognition of its unique and highly successful approach."26AA's sentinel text states, "AA is a fellowship of men and women who share their experience, strength, and hope with each other that they may solve their common problem and help others to recover from alcoholism" (p.xxiv).19,27 Twelve-step programs are free of cost and are available in 180 countries and more than 65000 cities in the U.S and Canada.^{18,25} For those who lack access to in-person meetings, there are hundreds of online meetings or chatrooms.²⁸ Moreover 12-step focused social network platforms like Facebook[™] and Reddit[™] provide individuals access to support any time of the day or night.^{29,30}

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Table 1. The twelve steps of alcoholics anonymous.1

- We admitted we were powerless over alcohol-that our lives had become unmanageable.
 Came to believe that a Power greater than ourselves could restore us to sanity.
- 3. Made a decision to turn our will and our lives over the care of God as we understood Him.
- 4. Made a searching and fearless moral inventory of ourselves.
- 5. Admitted to God, to ourselves, and to another human being the exact nature of our wrongs.
- 6. Were entirely ready to have God remove all these defects of character.
- 7. Humbly asked Him to remove our shortcomings.
- 8. Made a list of all persons we had harmed, and became willing to make amends to them all.
- 9. Made direct amends to such people wherever possible, except when to do so would injure them or others.
- 10. Continued to take personal inventory and when we were wrong promptly admitted it.
- 11. Sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of his will and the power to carry that out.
- 12. Having had a spiritual awakening as a result of these steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs.

Note: Adolescents substitute the word "alcohol" with whatever substance they personally struggle with.

¹Alcoholics Anonymous World Services I. *Twelve Steps and Twelve Traditions*. 77 ed. U.S.: Alcoholics Anonymous Publishing; 2012.

Positing that people with addiction have lost the ability to control their substance use, the 12-step philosophy defines recovery as abstinence from AODs and includes the personality changes and spiritual growth that result from practicing the 12 steps and assimilating the 12-step principles (eg, integrity, courage, hope, other-focus) into one's value system.^{27,31} Twelve-step programs are not affiliated with any political or religious organizations, and they do not require any particular belief system, but they do teach that spiritual experiences are the means by which changes that support recovery occur.^{16,23,24} People are encouraged to take personal responsibility for their behavior, read 12-step literature, attend 12-step meetings, abstain from the use of substances one day at a time, find a sponsor (a person in recovery who has worked the 12 steps) to guide them through the program, give of themselves in service, and develop a spiritual connection that makes sense to them.^{27,31,32} The emphasis of 12-step meetings is sharing recovery narratives. Sharing reduces members' sense of isolation, teaches practical skills for living a substance free life, and produces hope and a sense of belonging.^{33,34}

Adults and the 12 steps

A wide body of research demonstrates that 12-step groups help adults recover by mobilizing therapeutic processes that are similar to professional treatment.²³⁻²⁵ Twelve-step facilitated (TSF) treatment programs blend multiple evidence-based therapeutic elements (eg, CBT, MET, group and family therapy, etc.) with elements of the 12-step philosophy and frequently introduce individuals to community 12-step programs to facilitate transition to this recovery support model after treatment.6 TSF treatment programs produce as good or better rates of sustained remission than CBT or MET.35 The primary mechanisms of behavior change for adult 12-step participants are through the internal transformations that result from working through the 12 steps and from fellowship with the recovery community.^{33,36,37} Fellowship refers to the social gatherings and communication between members who teach, model and support recovery skills, values and behaviors.^{24,20,33,38} People with severe addiction recover through the same pathways, but they also report improvements in depression through enhanced spiritual practices.35-37

Adolescents and the 12 steps

Fewer studies have been done with adolescents and the 12-steps but evidence suggests 12-step involvement may be a viable option for post-treatment continuing care.2,4,5,11,16,60 In the U.S., almost half of adolescent treatment programs require 12-step involvement to some degree during treatment.5 Adolescents who attend TSF treatment programs have fewer substance use-related consequences and more 12-step involvement after treatment.⁴ Treatment programs that do not incorporate the 12-step philosophy or practices typically recommend that individuals attend 12-step or other mutual support groups after treatment to support their ongoing recovery.^{6,12,16} Twelve-step participation is related to improved outcomes and greater recovery capital resources for adolescents both during and after treatment.^{6,34,35,39,40} More frequent 12-step attendance predicts greater community recovery capital access, such as attending a recovery high school.³⁹ Adolescents who participate in 12-step programs have significantly more abstinent days and are more likely to remain abstinent than non-attenders.^{2,41} Adolescents who attend more frequently have better outcomes, and active involvement (working the steps with a sponsor, providing service, etc.) predicts sustained remission better than attendance alone.^{4,41} A 2010 review of 19 studies reported that 12-step involvement predicted two- to three-fold higher abstinence rates for adolescents.¹⁶

In 2017, Lee et al. found that 12-step involvement facilitated the experience of spiritual love in juvenile offenders mandated to a TSF treatment program. This experience combined with high levels of service to others produced higher levels of humility and was associated with reduced one-year recidivism and relapse rates.⁴² Adolescents with severe SUD and those with comorbid psychiatric problems participate in 12-step groups at similar or higher levels and experience comparable or better outcomes than their less severely affected counterparts.^{43,7} Moreover, 12-step involvement by adolescents has been shown to reduce medical costs over a 7-year period after treatment, with an estimated cost reduction ratio of 4.7% for every 12-step meeting attended.⁴⁴ These cost savings were related to reductions in SUD treatment, hospital stays, and mental health provider visits.⁴⁴

Though adolescents can attend any 12-step group, groups specifically designed for young people began in the 1940s. Though less available than adult groups, young people's groups are available in many communities and on-line.45,46 However, despite strong clinical recommendations and the availability of age-appropriate groups, many adolescents never attend 12-step groups, and those who do attend less frequently and drop out sooner than adults.^{16,43,47} Several potential barriers for adolescents' 12-step participation have been proposed.47 Adolescents typically have shorter substance use histories and fewer consequences for use, which may result in low problem recognition. Because of adolescents' developmentally-specific characteristics (limited insight, limit testing, and fewer physical problems related to substance use), they may enjoy getting high and resist the 12-step recommendation for total abstinence.^{16,49} Their developmental need for autonomy may lead adolescents to resist the 12-step principle of admitting powerlessness.^{16,49} The average age of AA and NA members is 48 years.^{50,51} This age disparity may lead adolescents to resist attending because they feel unsafe or unable to relate to the life roles and life experiences of older adults.¹⁶

Though limited, research on adolescent 12-step program participation supports some but not all of the aforementioned proposed barriers. Adolescents of both genders reported feeling safe at 12-step groups, and their reasons for dropping out or not attending were unrelated to safety concerns.^{52,53} The most common reason adolescents reported for not attending 12-step groups was opposition to the idea that they had a problem or needed help.54 Other primary reasons reported for not attending or discontinuing 12-step program attendance were logistical barriers (eg, no transportation), relapse, boredom, or lack of fit.53,40 Attending groups with similarly aged peers was found to be related to higher abstinence shortly after treatment but not over time, especially for adolescents who attended more often. This implies that attending groups with similarly aged peers may promote better participation early in recovery, but expanding to groups with older members may benefit adolescents who are further along in recovery.41 Adolescents in treatment whose parents were familiar with 12-step practices or who had histories of greater lifetime religious practices were found to adopt and practice the 12 steps more readily.55 This resulted in increased service-related behaviors, reduced cravings, and lower perceived entitlement.⁵⁵ Another study reported that practicing the 12-step virtue of service produced humility, fostered recovery, and reduced recidivism in a group of juvenile offenders that scored high on defiance.42

Adolescents' perceptions of the 12 steps

Though sparse, qualitative research exploring adolescents' perceptions of 12-step groups or experience practicing the 12 steps has shed light on the specific barriers and/or benefits to

12-step practices for this group. Studies with adolescents and young adults in treatment with some prior AA or NA experience solicited their reasons for attending (or not) 12-step groups and what they found helpful about these groups. On average, participants felt 12-step groups were helpful to their recovery efforts, although a quarter perceived no benefit from them at all.⁴⁰ Both adolescents and young adults valued general group therapy elements more than the 12-step practices.^{53,54} Aspects of 12-step groups that participants liked most involved social processes, such as being able to identify with and learn from others' experiences, as these provided encouragement, hope and support for recovery.⁵³ Gonzales et al.^{56,57} conducted focus groups with young people ages 12 to 24 who were in treatment. Most of these participants reported opposition to the 12-step philosophies of admitting personal powerlessness over substance use and maintaining lifelong abstinence. Resisting the concept of the need for ongoing treatment or 12-step program participation, these youth believed that the resolution of substance use problems was just a matter of learning coping skills and making better life choices.^{56,57} These perceptions may reflect the developmental distinctions of adolescence (limited insight, less severe consequences for use, poor problem recognition, and limit testing) that is typical of adolescents in treatment.8

In contrast to these findings, qualitative work with young adults who previously participated in an alternative peer group (APG) during adolescence revealed that although the social aspects were critical, they considered the process of working through the 12 steps to be the agency for their recovery.³⁴ The APG is a TSF community-based recovery support model for adolescents. APGs facilitate adolescents' development of new pro-recovery peer networks by incorporating peer role models and sober recreational activities into professional recovery-support practices such as counseling, family involvement, and case management.⁵⁸ These youth reported learning of the 12 steps in the APG but also attending outside groups. The majority of interviewees reported initial ambivalence or resistance to treatment that resolved over time with exposure to peers who had some time in recovery and seemed to be "happy." Furthermore most reported initial opposition to 12-step philosophies (particularly the spiritual aspects). However, over time with recovery role models they gained insight into their substance-related problems and with encouragement from peers, tried the 12 steps. Once they experienced personal benefits from the 12-steps, they either embraced the spiritual aspects or substituted dependence upon the group as their "higher power." The combination of social support from the APG and working the 12 steps led to motivation for sobriety and improvements in their mental health symptoms, relationships, and happiness.³⁴ Most remained involved for extended periods of time (from six months to several years).³⁴ This study recruited young people who considered themselves to be in recovery, so their perceptions were subject to self-selection bias. Never-the-less, findings of the study suggest involving peer role models may be key

to promoting adolescents' problem recognition and retention in continuing care.

In another study, adolescents who were actively or recently involved in an APG reported mixed perceptions of the 12 steps.48,59 Consistent with prior qualitative work,56,57 low problem recognition, poor motivation for treatment, and stereotypes about 12-step groups were common negative initial perceptions.⁴⁸ However, as peers advocated for the benefits and the participants tried working the steps, these initial negative impressions became more positive.⁴⁸ After a period of practicing the steps, the personal benefits (eg, reduced cravings, character growth, improved mental health symptoms and quality of life) became primary motivators for continuing 12-step practices.⁴⁸ Many participants reported ongoing opposition to the 12-step philosophy of lifelong sobriety, yet they reported practicing the 12 steps "for now," because they understood the need to protect their developing brains and felt the personal benefits outweighed their reluctance. Moreover, even the participants who were actively using substances and disinterested in recovery reported the 12 steps were beneficial in many areas of life beyond substance use (eg, improved relationships, enhanced self-awareness and self-agency).48

Resistance to the 12-step philosophy of admitting powerlessness over AOD use and seeking spiritual help has been proposed as a barrier for adolescents because it clashes with adolescents' developmental need for autonomy or their inclination to test limits.^{16,41,43} When asked about their reasons for attending or discontinuing 12-step groups, adolescents did not list the spiritual focus as a major benefit, nor was it a reason for discontinuing attendance.⁴⁰ Other qualitative findings have confirmed that the spiritual focus and admitting powerlessness were significant initial barriers, but consistent with prior research, this resistance was most prominent from those who were just beginning the treatment/recovery process.48,56,57,34 Adolescents who had actually tried working the 12 steps with recovering peers either found the spiritual aspects of the 12 steps helpful or reported that their personal lack of spiritual beliefs did not prevent them from being able to practice the steps they found to be helpful.⁴⁸

Conclusion

Completion of evidence based treatments programs like family therapy, MET, and CBT leads to reductions in adolescents' substance use.^{10,61} However, effect sizes are moderate at best and treatment gains fade relatively quickly over time.^{12,62} Thus, continuing care or recovery support services are commonly recommended to sustain treatment gains.¹² Though not the only model for post-treatment recovery support, research to date suggests that similar to adults, adolescents' involvement in 12-step groups predicts improved AOD use outcomes, and greater participation (ie, frequency, duration, and extent of involvement) predicts abstinence and SUD remission better than attendance alone.^{2,4,6,16,41} Moreover, 12-step participation reduces the associated healthcare costs for adolescents with SUD.⁴⁴ Despite these benefits, in 2015 <2% of AA's and NA's total membership comprised people under 21 years old.^{50,51} Qualitative research has shed light on adolescents' reasons for resisting or engaging in 12-step practices and suggests strategies for promoting their involvement.^{53,56,57}

To facilitate change in their adolescent clients' social networks and sustain treatment gains clinicians should explore the continuing care options specifically designed for adolescents in their communities. Recovery high schools63,64 and APGs58,65 are proliferating in communities and may be a more developmentally appropriate option for adolescents because they are professionally directed. If these are not available, research suggests many youth benefit from participation in 12-step groups. A primary strategy clinicians can use to boost adolescents' motivation for 12-step involvement is to connect adolescents affected by SUD with a community of peers who advocate for the benefits of 12-step involvement.^{34,48,58,34,48} Youth-focused 12-step groups can be found in many communities, and on-line meetings or social media platforms for young people have increased greatly in the past five years.^{28–30,45} Though research in this area for adolescents is lacking, web-based options may improve access for youth with transportation barriers. Resistance to the 12-step philosophy of life-long sobriety can be addressed by exploring the potential benefits of maintaining sobriety "for now" and involving recovering peers as advocates. Opposition to the spiritual focus can be addressed by relating how other adolescents have been able to benefit from the social support and practical skills gained from 12-step groups without feeling pressured to embrace the spiritual aspects of 12-step philosophy.⁴⁸ If available in the community, secular mutual help groups like SMART Recovery may be another option.65

The findings of this review should be considered in light of its potential limitations, chiefly the relative paucity of research on 12-step groups and adolescents. At the time of this review the majority of available studies were observational or qualitative, with only one small RCT (n=74).6 Because adolescents' likelihood of relapse increases over time, attrition or self-selection may have biased outcomes of longitudinal studies that recruited adolescents while in treatment and monitored them over time. Study samples may have limited generalizability. Most studies were conducted in the U.S. and included primarily Caucasian or Latino participants. The qualitative studies included sample sizes ranging from 12 to 377 and the observational studies included sample sizes ranging from 118 to 403 subjects. Rigorous research studies are needed to examine the short and long-term effects, the mechanisms of behavior change, and predictors of positive or negative outcomes of adolescent 12-step involvement.

This review aimed to enhance clinician's ability to decide if, how and when to refer their adolescent clients to 12-step programs. Helping adolescents achieve long-term stable recovery from SUD can reduce the negative impact of AOD use on adolescents' developing brains and limit the personal and societal costs of adult addiction.^{7,8} Twelve-step programs are the best known and most widely available mutual support programs, and are commonly recommended as an adjunct to professional treatment.³² Twelve-step groups (particularly those with similar-aged members) provide recovery-supportive social networks to teach and model the recovery skills adolescents need to change from lifestyles that circled around AOD use. Although further research is needed, research to date suggests that 12-step involvement may be a cost-effective option for supporting treatment gains for some adolescents.⁶⁰

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