



Newcomers to Al-Anon family groups: Who stays and who drops out? [☆]



Christine Timko ^{a,b,*}, Alexandre Laudet ^c, Rudolf H. Moos ^{a,b}

^a Center for Innovation to Implementation, Department of Veterans Affairs Health Care System, 795 Willow Rd (152-MPD), Menlo Park, CA 94025, USA

^b Stanford University School of Medicine, Palo Alto, CA, USA

^c National Development and Research Institutes, 71 West 23rd St. (8th floor), New York, NY 10010, USA

HIGHLIGHTS

- Al-Anon is the most-used form of help for people concerned about another's drinking.
- We assessed the prevalence and predictors of dropout among Al-Anon newcomers.
- Drop-outs had fewer referrals by providers and less severe problems than attendees.
- Drop-outs were more concerned about their drinker's psychological health.
- Drop-outs had high rates of problems and would benefit from ongoing help and support.

ARTICLE INFO

Available online 3 March 2014

Keywords:

Al-Anon Family Groups
Mutual-help
12-step groups
Alcohol use disorders
Addiction
Family

ABSTRACT

Al-Anon Family Groups (Al-Anon), a 12-step mutual-help program for people concerned about another's drinking, is the most widely used form of help for concerned others (COs) in the US. This study assessed the prevalence of dropout, and predictors of dropout, in the six months following newcomers' initial attendance at Al-Anon meetings. Al-Anon's World Service Office mailed a random sample of groups, which subsequently yielded a sample of 251 newcomers who completed surveys at baseline and 6 months later. At the 6-month follow-up, 57% of newcomers at baseline had dropped out (had not attended any Al-Anon meetings during the past month). At baseline, individuals who later dropped out of Al-Anon were less likely to have been referred to Al-Anon by their drinker's health care provider, and reported less severe problems than individuals who continued to attend, but dropouts were more often concerned about their drinker's psychological health; newcomers with these concerns may have found them incompatible with Al-Anon's philosophy. Dropouts reported high rates of problems, suggesting that COs who drop out of Al-Anon would benefit from ongoing help and support.

Published by Elsevier Ltd.

1. Introduction

Al-Anon Family Groups (Al-Anon) is a 12-step mutual-help program for people concerned about another's drinking. Al-Anon is the most widely used form of help for concerned others (COs) in the US (Miller, Meyers, & Tonigan, 1999; O'Farrell & Clements, 2012; O'Farrell & Fals-Stewart, 2001). This study assessed the prevalence of dropout,

and predictors of dropout, in the six months following newcomers' initial attendance at Al-Anon meetings. Greater knowledge of factors associated with early dropout may increase provider awareness about COs and lead to more effective and efficient targeting of Al-Anon facilitation efforts.

1.1. Prevalence of dropout from 12-step groups

Participation in 12-step groups is associated with positive outcomes (Magura, Cleland, & Tonigan, 2013; Moos & Moos, 2007), but dropout rates are high. Dropout from Alcoholics Anonymous (AA) attendance has been studied among individuals treated for substance use disorders (SUDs). For example, dropout from 12-step groups was 40% at 1 year following SUD treatment (Kelly & Moos, 2003). Similarly, in Project MATCH's Twelve Step Facilitation outpatient condition, 41% of clients who initiated AA attendance during treatment dropped out during the following nine months (Tonigan, Connors, & Miller, 2003). Dropout from consistent 12-step group attendance over 2 years among treated

[☆] This research was supported by the NIH/NIAAA (1R21AA019541-01) and Dr. Timko by the Department of Veterans Affairs (VA) Office of Research and Development (Health Services Research & Development Service, RCS 00-001). We thank Ruth Cronkite, Lee Ann Kaskutas, and Jeffrey Roth for project guidance, and Stella Chan, Michelle Joyner, and Nicole Short for project management. The views expressed here are of the authors'.

* Corresponding author at: Center for Innovation to Implementation, VA Health Care System (152-MPD), 795 Willow Road, Menlo Park, CA 94025, USA. Tel.: +1 650 493 5000x23336; fax: +1 650 617 2736.

E-mail addresses: ctimko@stanford.edu (C. Timko), AlexandreLaudet@gmail.com (A. Laudet), rmoos@stanford.edu (R.H. Moos).

cocaine users was 60% (Fiorentine, 1999). We have been unable to locate any estimates of dropout rates from Al-Anon, with the exception of an article from *Good Housekeeping* in 1960, stating that about 10% of attendees dropout after two or three meetings. However, the article did not provide the source of this statement.

1.2. Predictors of dropout from 12-step groups

Factors associated with dropout from 12-step groups include the demographic characteristics of being white, younger, less educated, and less likely to attend religious services (Kelly & Moos, 2003; Laudet, Magura, Cleland, Vogel, & Knight, 2003; McCrady, Epstein, & Hirsch, 1996). The main reason for initiating Al-Anon participation is accumulated life stressors and lack of resources, such as the drinker's or family's financial, relationship, legal, health, and work problems (Roth, 2004; Roth & Tan, 2007, 2008), but the extent to which these factors are associated with subsequent dropout by Al-Anon newcomers is unknown. Dropouts from conjoint treatment for alcoholism were less committed to their relationship with their spouse or partner (Epstein, McCrady, Miller, & Steinberg, 1994), and dropouts from 12-step groups reported being unable to relate to the severe life stressors and lack of resources experienced by other members (Klaw & Humphreys, 2000). Such findings suggest that problems due to life stressors and lack of social resources may be less common among Al-Anon dropouts than among stable members.

Resistance to 12-steps groups stems partly from a perceived lack of meeting convenience (e.g., distance from the nearest meeting, bad timing of meetings) (Kelly, Kahler, & Humphreys, 2010; Laudet, 2003). In addition, individuals with beliefs that are discordant with 12-step philosophy are less inclined to actively engage with mutual-help groups (Ouimette et al., 2001). For example, not believing in the disease model of addiction, not having an abstinence goal, not perceiving a need for lifelong 12-step group attendance or support from a higher power, and conflicts with the concepts of surrender, powerlessness, and spirituality were associated with subsequent reduced participation or dropout (Fiorentine & Hillhouse, 2000; Kelly & Moos, 2003; Klaw & Humphreys, 2000; Mankowski, Humphreys, & Moos, 2001). Additional reasons for dropout from 12-step attendance identified by Kelly et al. (2010) were discomfort with self-disclosure and with the group format. Similarly, McCrady et al. (1996) noted that individuals who decreased their involvement with AA over the course of SUD treatment felt uncomfortable with certain aspects of the program, and also may have had goals that AA was unable to meet.

Limited evidence suggests that dropout from 12-step groups is also associated with better functioning at the time of initial attendance in terms of self-reported health (Kelly et al., 2010; Laudet et al., 2003; McCrady, 1998). Although more participation in 12-step groups has been associated with more reliance on approach coping, and less on avoidance coping, to deal with health and other personal crises (Forys, McKellar, & Moos, 2007; Humphreys, Mankowski, Moos, & Finney, 1999; Majer, Droegge, & Jason, 2012), research has not examined the extent to which newcomers' coping styles are associated with their subsequent engagement with mutual-help groups such as Al-Anon.

1.3. Present study

The purpose of this study of Al-Anon newcomers was to examine the prevalence and baseline predictors of dropout six months later. Although attendees' demographic characteristics, life stressors and resources, views of 12-step programs, goals of attendance, functioning, and coping have been examined in relation to participation in and dropout from other mutual-help groups, these factors have not been examined to understand dropout from Al-Anon. It is not known whether similar factors are associated with dropout from Al-Anon or whether other factors are responsible. In particular, unique to Al-Anon,

is that newcomers' views of the drinkers in their lives may be related to subsequent drop-out and retention. That is, drinkers' characteristics, including their life stressors and functioning, may help to explain why some Al-Anon newcomers drop out and others do not. Identifying predictors of dropout, especially those that are amenable to intervention, should suggest strategies to enhance the utilization of Al-Anon by COs.

2. Method

2.1. Sample

The sample was 228 of 251 individuals who completed surveys at baseline and 6 months later, and whose status as dropped out or retained at follow-up could be determined (see Results section). All participants were Al-Anon newcomers at baseline; in accordance with Al-Anon convention, "newcomer" was defined as having attended 6 Al-Anon meetings or fewer (lifetime).

2.2. Procedure

2.2.1. Baseline

To acquire the sample, Al-Anon's World Service Office (WSO) mailed (but did not pay for) a random sample of 4500 Al-Anon groups. The WSO is a combined business office and service center that registers and supports Al-Anon groups, coordinates Al-Anon conferences, and creates and distributes Al-Anon literature and outreach materials throughout the world. The mailing introduced the study, asked permission for research staff to contact the group, and stated that the group was free to accept or refuse. Representatives were asked to return their group's permission to be contacted, their contact information, and an estimate of the number of newcomers attending their group per month directly to the researchers in prepaid envelopes; "newcomer" was defined. Of the 979 groups (22%) responding, 853 (87%) gave permission, and 126 (13%) refused (Timko et al., 2013).

Research staff mailed responding Representatives a cover letter explaining procedures to hand out surveys to newcomers and the purpose and potential benefits of the survey, and inviting them to call and discuss questions or concerns. The mailing included the number of survey packets corresponding to the estimated number of newcomers per month. Representatives were given a standard script to follow and asked to give the survey to the next newcomer at their meetings, without regard to demographic or other characteristics. If newcomers declined the survey, Representatives offered it to the next newcomer. Representatives were asked to send a notice to research staff (envelope provided), indicating how many newcomers who were approached declined. Of the 853 groups contacted, 784 (91.9%) returned notices; of these, 672 (85.7%) participated, and, on average, had obtained a refusal from less than one newcomer ($M = .48$, $SD = 1.2$).

A cover letter with the newcomer questionnaire and consent form provided a study summary (aims; methods; the survey's voluntary and confidential nature, basic content, and time requirements; how to contact project staff; request to complete the survey within two weeks). Surveys were received from 54% ($N = 360$) of groups that agreed to participate. Respondents ($N = 631$; mean number per group = 1.9; $SD = 1.2$) were offered a \$25 gift card. They returned their consent form and questionnaire in separate envelopes to protect confidentiality.

2.2.2. Follow-up

Of the 631 respondents, 365 were newcomers. Of the 365 newcomers, 305 (83.6%) agreed, at the time of the baseline survey, to be contacted about the 6-month follow-up survey. After 6 months, participants were mailed a copy of the follow-up survey and contacted by email to let them know the follow-up survey had been mailed to them. Participants again returned their survey and payment

Table 1
Demographic characteristics of Al-Anon newcomer dropouts (n = 130) and attendees (n = 98).

| | Dropouts | Attendees | χ^2 or t | Total |
|---|-----------------|-----------------|---------------|-----------------|
| | % (N) or M (SD) | % (N) or M (SD) | | % (N) or M (SD) |
| Female | 88.3 (113) | 85.3 (81) | .44 | 87.0 (194) |
| White | 96.9 (124) | 91.7 (88) | 8.40 | 95.1 (212) |
| Age | 44.7 (13.3) | 47.5 (12.6) | −1.60 | 46.7 (13.4) |
| Married or living with intimate partner | 61.7 (79) | 63.2 (60) | .05 | 62.3 (139) |
| Years of education | 15.2 (2.2) | 15.1 (1.9) | .27 | 15.2 (2.1) |
| Employed | 66.9 (85) | 76.3 (71) | 2.34* | 70.9 (156) |
| Personal income (\$) | 53,200 (62,200) | 55,000 (66,500) | −.19 | 53,991 (63,868) |
| You and your family have health insurance | 86.5 (109) | 86.3 (82) | .00 | 86.4 (191) |
| Any children under 18 | 40.9 (52) | 31.6 (30) | 2.05 | 36.9 (82) |
| Any children 18 years or older | 41.7 (53) | 53.7 (51) | 3.12* | 46.8 (104) |
| Number years living where you are now | 7.9 (9.3) | 9.4 (10.2) | 3.80* | 8.6 (9.7) |
| Lives with family | 72.7 (93) | 71.3 (67) | .96 | 72.1 (160) |
| Religious practices | | | .59 | |
| Spiritual | 50.4 (64) | 46.8 (44) | | 49.8 (110) |
| Religious | 43.3 (55) | 48.6 (44) | | 44.8 (99) |
| Other (atheist, agnostic, or unsure) | 6.3 (8) | 4.3 (4) | | 5.6 (12) |

* p < .05.

information separately to protect their confidentiality, and received \$25 as compensation for participating. Of the 305 agreeing to the follow-up survey at baseline, 251 (82.3%) returned it. Of those who did not return the follow-up survey, 4 (12%) could not be located, and 50 (63%) were located but did not return the questionnaire.

2.2.3. Surveys

Although the 6-month survey asked about current well-being, only one question from the survey was used in this study: How many Al-Anon meetings have you attended in the past month? Otherwise, all analyses are based on the baseline survey. Baseline survey items

were drawn mainly from the Health and Daily Living Form (HDL; Moos, Cronkite, & Finney, 1992), which has demonstrated strong psychometric characteristics in family studies of alcohol use and other mental health disorders (Brennan, Schutte, & Moos, 2010; Timko et al., 2009). The survey was pretested with four individuals (Al-Anon group secretary, long-term member, newcomer, dropout).

The survey ascertained newcomers' demographic characteristics (Table 1). It asked about influences on the individual's decision to initially come to an Al-Anon meeting (Table 2). Specifically, respondents noted whether they initially came to Al-Anon because of (a) each of 10 problems, (b) each of 7 people or groups who may have advised or

Table 2
Al-Anon newcomer drop-outs (n = 130) and attendees (n = 98): Influences on the decision to come to an Al-Anon meeting.

| | Dropouts | Attendees | χ^2 | Total |
|---|------------|-----------|----------|------------|
| | % (N) | % (N) | | % (N) |
| <i>Problems with your:</i> | | | | |
| Overall quality of life and well-being | 93.7 (118) | 92.6 (88) | .09 | 93.2 (206) |
| Relationship with your: drinker | 89.0 (113) | 94.7 (90) | 2.42* | 91.4 (203) |
| Spouse/partner | 67.7 (86) | 76.8 (73) | 2.26* | 71.6 (159) |
| Relatives | 62.5 (80) | 53.1 (51) | 1.98* | 58.5 (131) |
| Children | 47.7 (61) | 44.8 (43) | .18 | 46.4 (104) |
| Friends | 33.9 (43) | 33.3 (32) | .01 | 33.6 (75) |
| Finances | 35.9 (46) | 35.8 (34) | .00 | 35.9 (80) |
| Home or neighborhood | 29.7 (38) | 25.0 (24) | .61 | 27.7 (62) |
| Work or school | 25.8 (33) | 24.0 (23) | .10 | 25.0 (56) |
| Police, law, criminal justice system | 12.6 (16) | 11.5 (11) | .07 | 12.1 (27) |
| <i>People who advised or encouraged you to try Al-Anon:</i> | | | | |
| Friends or coworkers | 44.5 (57) | 41.7 (40) | .18 | 43.4 (97) |
| People you know in Al-Anon | 38.6 (49) | 29.2 (28) | 2.16* | 34.5 (77) |
| Family members | 34.4 (44) | 31.3 (30) | .24 | 33.0 (74) |
| People you know in AA | 30.7 (39) | 31.3 (30) | .01 | 30.9 (69) |
| Your drinker's health provider(s) | 25.0 (32) | 34.7 (33) | 2.49* | 29.1 (65) |
| Your main drinker | 22.0 (28) | 28.1 (27) | 1.08 | 24.7 (55) |
| Your own doctor or other provider | 27.3 (35) | 24.0 (23) | .33 | 28.9 (58) |
| <i>Reason you came to Al-Anon:</i> | | | | |
| Agree that alcoholism is a disease | 88.7 (110) | 88.2 (82) | .02 | 88.5 (192) |
| Like Al-Anon's anonymity | 80.8 (101) | 76.6 (72) | .57 | 79.0 (173) |
| Want a circle of friends you can relate to | 84.8 (105) | 77.7 (73) | 1.41 | 81.3 (178) |
| Meetings are at convenient times and places | 85.6 (107) | 70.2 (66) | 7.60** | 79.0 (173) |
| Meetings are free of charge | 83.2 (104) | 68.4 (65) | 6.58** | 76.8 (169) |
| Want to meet people who may be role models | 76.0 (95) | 70.7 (65) | .78 | 73.7 (160) |
| Like Al-Anon's spiritual orientation | 64.8 (81) | 68.1 (64) | .26 | 66.2 (145) |
| People you know benefited from Al-Anon | 64.8 (81) | 58.5 (55) | .90 | 62.1 (136) |
| Like Al-Anon's group format | 66.4 (83) | 56.4 (53) | 2.28* | 62.1 (136) |
| Want drinker to go to AA | 54.8 (68) | 54.8 (51) | .00 | 54.8 (119) |
| Want drinker to get professional treatment | 53.6 (67) | 52.1 (49) | .05 | 53.0 (116) |

* p < .05.

** p < .01.

Table 3
Health status of Al-Anon newcomer drop-outs (n = 130) and attendees (n = 98).

| | Drop-outs | Attendees | χ^2 or t | Total |
|---|-----------------|-----------------|---------------|-----------------|
| | % (N) or M (SD) | % (N) or M (SD) | | % (N) or M (SD) |
| <i>How would you describe your health?</i> | | | | |
| Good or excellent | 88.1 (111) | 81.9 (77) | 1.65 | 85.5 (188) |
| <i>In the past 6 months, had:</i> | | | | |
| Diagnosed medical condition | 33.3 (42) | 43.0 (40) | 2.13* | 37.4 (82) |
| Diagnosed psychological condition | 38.3 (49) | 43.2 (41) | .54 | 40.4 (90) |
| Physical abuse | 8.6 (11) | 16.8 (16) | 3.44* | 12.1 (27) |
| Sexual abuse | 5.0 (6) | 2.2 (2) | 1.15 | 3.8 (8) |
| <i>In the past 6 months, often experienced feeling:</i> | | | | |
| Anxious (tense) | 88.9 (112) | 84.9 (79) | .74 | 87.2 (191) |
| Depressed (sad or blue) | 73.8 (93) | 74.2 (69) | .00 | 74.0 (162) |
| Guilty | 66.9 (85) | 69.2 (63) | .13 | 67.9 (148) |
| Happy | 65.6 (82) | 72.5 (66) | 1.18 | 68.5 (148) |
| Hopeless | 62.2 (79) | 63.0 (58) | .02 | 62.6 (137) |
| A positive attitude toward yourself | 60.8 (76) | 59.8 (55) | .02 | 60.4 (131) |
| A lot of control over what happens to you | 44.4 (56) | 34.1 (31) | 2.39* | 40.1 (87) |
| <i>In the past month:</i> | | | | |
| Had a drink containing alcohol | 58.4 (73) | 62.8 (59) | .51 | 60.3 (132) |
| Drank 5 or more drinks on one occasion | 23.0 (17) | 20.3 (12) | .13 | 21.8 (29) |
| Used prescription drugs | 55.1 (70) | 60.6 (57) | .67 | 57.5 (127) |
| Used non-prescription drugs | 3.2 (4) | 4.3 (4) | .67 | 3.6 (8) |

* p < .05.

encouraged them to try Al-Anon, and (c) each of 11 aspects of Al-Anon. Also, respondents reported on their goals of initial Al-Anon attendance (not tabled), health status (Table 3), and personal functioning and coping (Table 4). Further, survey respondents described their main drinker in terms of his or her demographic and relationship characteristics; substance use, its consequences, and help obtained; and concerns that prompted initial Al-Anon attendance (Table 5).

2.3. Data analysis

We compared baseline characteristics of newcomers who dropped out with those who were retained in Al-Anon as of the 6-month follow-up using t-tests for continuous variables, and chi-square tests for categorical variables.

Table 4
Functioning and coping of Al-Anon newcomer drop-outs (n = 130) and attendees (n = 98).

| | Drop-outs | Attendees | χ^2 | Total |
|--|------------|-----------|----------|------------|
| | % (N) | % (N) | | % (N) |
| <i>Satisfied with your:</i> | | | | |
| Relationship with friends | 73.4 (91) | 70.3 (64) | .24 | 72.1 (155) |
| Relationship with children | 63.3 (57) | 67.2 (43) | .24 | 64.9 (100) |
| School or work | 63.2 (60) | 65.3 (49) | .09 | 64.1 (109) |
| Home and neighborhood | 63.1 (77) | 64.3 (54) | .03 | 63.6 (131) |
| Relationship with relatives | 61.8 (76) | 67.1 (57) | .61 | 63.9 (133) |
| Finances | 49.2 (61) | 37.6 (35) | 2.89* | 44.2 (96) |
| Overall quality of life and well-being | 44.1 (56) | 33.7 (32) | 2.48* | 39.6 (88) |
| Relationship spouse or partner | 32.0 (32) | 24.7 (20) | 1.18 | 28.7 (52) |
| Relationship with drinker | 19.5 (24) | 12.2 (11) | 2.07* | 16.4 (35) |
| <i>When you have an important problem or crisis to deal with, you:</i> | | | | |
| Talk with family, friends | 92.2 (118) | 92.6 (88) | .02 | 92.4 (206) |
| Step back and be more objective | 75.0 (96) | 58.9 (56) | 6.44** | 68.2 (152) |
| Try to see the good side | 70.3 (90) | 62.4 (58) | 1.53 | 67.0 (148) |
| Seek help from people, groups with same problem | 65.6 (84) | 60.0 (57) | .74 | 63.2 (141) |
| Make a plan of action and follow it | 60.3 (76) | 46.8 (44) | 3.97* | 54.5 (120) |
| Try not to think about the problem | 59.5 (75) | 49.5 (47) | 2.21* | 55.2 (122) |
| Talk with a professional (such as a doctor) | 50.8 (65) | 62.1 (59) | 2.85* | 55.6 (124) |
| Take upset feelings out on other people | 50.0 (64) | 49.5 (47) | .01 | 49.8 (111) |
| Spend more time in work, leisure, social activities | 44.9 (57) | 42.1 (40) | .17 | 43.7 (97) |
| Try to help others with a similar problem | 44.9 (57) | 29.5 (28) | 5.53** | 38.3 (85) |
| Accept it: Nothing can be done | 33.1 (42) | 33.0 (31) | .00 | 33.0 (73) |

* p < .05.

** p < .01.

3. Results

3.1. Dropout rate

At the 6-month follow-up, dropout was defined as not having attended any Al-Anon meetings during the past month; retention was defined as having attended at least one meeting during the past month. As reviewed by Laudet (2003), declines in 12-step group participation typically begin about 3 months after attendance initiation. A total of 23 respondents did not report how many meetings they had attended in the past month, leaving 228 respondents for analyses. Using the definitions, 130 (57.0%) newcomers at baseline had dropped out at 6 months, and 98 (43.0%) were retained in Al-Anon. The 98 still attending at 6 months had attended a mean of 22.8 meetings (SD =

Table 5
Drinkers of Al-Anon newcomer drop-outs (n = 130) and attendees (n = 98).

| | Drop-outs | Attendees | t or χ^2 | Total |
|---|-----------------|-----------------|---------------|-----------------|
| | M (SD) or % (N) | M (SD) or % (N) | | M (SD) or % (N) |
| <i>Demographics</i> | | | | |
| Age | 44.4 (15.9) | 46.0 (15.4) | -.72 | 45.1 (15.7) |
| Male | 73.2 (90) | 74.7 (68) | .07 | 73.8 (158) |
| <i>Relationship</i> | | | | |
| Years known drinker | 20.8 (15.0) | 20.9 (14.9) | -.05 | 20.9 (14.9) |
| Years troubled by drinker's drinking | 9.4 (10.4) | 9.0 (9.8) | .30 | 9.3 (10.1) |
| Years drinker's drinking has been a problem | 13.1 (13.3) | 12.1 (12.3) | .51 | 12.7 (12.8) |
| In-person, daily contact with drinker | 50.4 (64) | 52.8 (47) | .89 | 51.4 (111) |
| Other daily contact with drinker (email, phone) | 45.8 (55) | 54.5 (48) | 4.52* | 49.5 (103) |
| A lot of concern about drinker's: Drinking alcohol | 55.9 (71) | 66.7 (71) | 3.40* | 60.5 (133) |
| Prescription drug use | 26.6 (33) | 34.8 (32) | 1.97 | 30.1 (65) |
| Use of non-prescribed drugs | 26.6 (34) | 31.5 (29) | .71 | 28.6 (63) |
| <i>Drinker's problems due to drinking or drug use:</i> | | | | |
| Psychological health | 71.2 (89) | 61.5 (56) | 2.22* | 67.1 (145) |
| Family arguments | 65.6 (82) | 69.2 (63) | .32 | 67.1 (145) |
| Physical health | 64.8 (81) | 56.0 (51) | 1.69 | 61.1 (132) |
| Money | 64.0 (80) | 58.2 (53) | .74 | 61.6 (133) |
| Job or school | 54.4 (68) | 52.7 (48) | .06 | 53.7 (116) |
| Driving under the influence (DUI) | 53.6 (67) | 51.6 (47) | .08 | 52.8 (114) |
| Friend or neighbor arguments | 39.5 (49) | 46.2 (41) | .95 | 42.3 (91) |
| Broke or damaged property | 26.6 (33) | 24.2 (22) | .16 | 25.6 (55) |
| Arrested | 16.8 (21) | 15.4 (14) | .08 | 16.2 (35) |
| <i>Drinker's drinking and drug use in past month:</i> | | | | |
| Drank at all | 59.8 (61) | 63.8 (51) | .30 | 61.5 (112) |
| If drank at all: number days drank | 18.0 (10.8) | 20.0 (9.9) | -1.06 | 19.8 (10.4) |
| Number drinks, typical drinking day | 9.3 (11.5) | 8.2 (5.6) | .57 | 8.8 (8.6) |
| Number of times had 5 or more drinks | 12.0 (10.5) | 14.7 (10.2) | -1.12 | 13.1 (10.4) |
| Used prescription drugs at all | 50.5 (55) | 54.7 (41) | .32 | 52.2 (96) |
| Used non-prescription drugs at all | 20.8 (22) | 18.9 (14) | .09 | 20.0 (36) |
| <i>Concerns about drinker that influenced initial participation in Al-Anon:</i> | | | | |
| Confused about how to cope with life problems | 86.4 (108) | 82.8 (77) | .54 | 84.9 (185) |
| Depressed or moody | 85.7 (108) | 84.0 (79) | .12 | 85.0 (187) |
| Stressed, tense, anxious, unable to relax | 83.3 (105) | 73.1 (68) | 3.33* | 79.0 (173) |
| Missing what's important in life | 83.2 (104) | 83.9 (78) | .02 | 83.5 (182) |
| Low self-esteem | 77.8 (98) | 69.1 (65) | 2.07* | 74.1 (163) |
| Angry | 75.4 (95) | 81.7 (76) | 1.27 | 78.1 (171) |
| Neglecting responsibilities | 70.6 (89) | 71.0 (66) | .00 | 70.8 (155) |
| Unsatisfying spiritual life | 69.6 (87) | 59.8 (55) | 2.25* | 65.4 (142) |
| Lonely and isolated | 68.8 (86) | 66.7 (62) | .11 | 67.9 (148) |
| Feels hopeless | 65.6 (82) | 59.1 (55) | .95 | 62.8 (137) |
| Drinks too much, too often | 65.1 (82) | 68.8 (64) | .34 | 66.7 (146) |
| Drinking causes problems for loved ones | 64.3 (81) | 72.0 (67) | 1.48 | 67.6 (148) |
| Drinking causes serious harm to him/her | 63.5 (80) | 61.3 (57) | .11 | 62.6 (137) |
| Physical health problems | 62.4 (78) | 55.9 (52) | .93 | 59.6 (130) |
| Drinking causes serious harm to others | 49.6 (62) | 43.3 (39) | .83 | 47.0 (101) |
| Drinks around other people | 41.3 (52) | 39.6 (36) | .06 | 40.6 (88) |
| Uses drugs | 39.8 (49) | 39.4 (37) | .01 | 39.6 (86) |
| Receives verbal/physical abuse | 22.5 (27) | 17.2 (16) | .92 | 20.2 (43) |
| <i>Drinker's help-seeking for alcohol and drugs in past 6 months:</i> | | | | |
| Detoxification | 25.0 (31) | 31.9 (29) | 1.22 | 27.9 (60) |
| Inpatient or residential program | 29.3 (36) | 31.9 (29) | .17 | 30.4 (65) |
| Outpatient care | 25.8 (32) | 28.6 (26) | .20 | 27.0 (58) |
| 12-step mutual-help groups | 45.2 (57) | 50.0 (45) | .48 | 47.2 (102) |
| Number of meetings, if attended | 32.4 (40.9) | 58.3 (91.9) | -1.72* | 43.9 (69.2) |
| Had 12-step sponsor | 30.4 (38) | 28.7 (25) | .07 | 29.7 (63) |

* p < .05.

18.0) in the past 6 months and 3.9 (SD = 3.0) in the past month, compared to drop-outs' mean of 5.8 (SD = 6.6) in the past 6 months and 0 in the past month (t = -8.69 and -12.63, respectively, p < .001).

3.2. Predictors of dropout

3.2.1. Demographics

At baseline, dropouts were less likely to be employed ($X^2 = 2.34$, $p < .05$) and to have adult children ($X^2 = 3.12$, $p < .05$), and had lived a fewer number of years in their present residence ($X^2 = 3.80$, $p < .05$)

(Table 1). Otherwise, dropouts and attendees did not differ on demographic characteristics.

3.2.2. Influences on the initial decision to attend Al-Anon

At baseline, dropouts were less likely than attendees to report that problems in their relationships with their main drinker ($X^2 = 2.42$, $p < .05$), and with their spouse or partner ($X^2 = 2.26$, $p < .05$), influenced their initial decision to attend Al-Anon (Table 2). However, dropouts were more likely to report that problems with their relatives influenced this decision ($X^2 = 1.98$, $p < .05$). Dropouts were more likely to have been advised or encouraged to attend Al-Anon by people they

know in Al-Anon ($X^2 = 2.16, p < .05$), but less likely to have been encouraged by their drinker's health provider ($X^2 = 2.49, p < .05$). Further, dropouts were more likely to endorse meetings' convenience ($X^2 = 7.60, p < .01$), no-cost ($X^2 = 6.58, p < .01$), and group format ($X^2 = 2.28, p < .05$) as reasons for initial attendance.

In addition to influences on the decision to come to an Al-Anon meeting, the survey assessed goals of Al-Anon attendance. These goals, which are not tabled, focused on improving the problems that may have influenced the initial decision to attend a meeting. Dropouts and attendees did not differ on what they hoped to gain from Al-Anon.

3.2.3. Health status

As shown in Table 3, dropouts were less likely than attendees to report a diagnosed medical condition ($X^2 = 2.13, p < .05$) and to be the recipient of recent physical abuse ($X^2 = 3.44, p < .05$). They were also more likely to state that they felt they had a lot of control ($X^2 = 2.39, p < .05$). Dropouts and attendees did not differ on recent use of alcohol or drugs.

3.2.4. Functioning and coping

Compared to attendees, dropouts were more likely to be satisfied with their finances ($X^2 = 2.89, p < .05$), overall quality of life and well-being ($X^2 = 2.48, p < .05$), and relationship with the drinker ($X^2 = 2.07, p < .05$) (Table 4). However, even among dropouts, less than one-half were satisfied with these aspects of their lives.

Dropouts were more likely to endorse aspects of approach coping as methods they used (step back and be more objective [$X^2 = 6.44, p < .01$], make a plan of action and follow it [$X^2 = 3.97, p < .05$], try to help others with similar problems [$X^2 = 5.53, p < .01$]), but were also more likely to endorse one aspect of avoidance coping (try not to think about the problem; $X^2 = 2.21, p < .05$). Dropouts were less likely to say they talk with professionals to cope with crises ($X^2 = 2.85, p < .05$).

3.2.5. Drinker

Dropouts did not differ from attendees on the drinker's demographic characteristics or their relationship history with the drinker (Table 5). Dropouts were less likely to have daily contact with the drinker other than in-person ($X^2 = 4.52, p < .05$), and to have a lot of concern about the drinker's alcohol use ($X^2 = 3.40, p < .05$). Drinkers of dropouts were more likely to be seen as having psychological problems ($X^2 = 2.22, p < .05$), but otherwise dropouts and attendees did not differ on drinker's substance use or its consequences.

With respect to concerns about the drinker that prompted initial Al-Anon attendance, compared to attendees, dropouts were more likely to be concerned about their drinker's stress ($X^2 = 2.33, p < .05$), low-self-esteem ($X^2 = 2.07, p < .05$), and unsatisfying spiritual life ($X^2 = 2.25, p < .05$). Drinkers of dropouts who attended 12-step groups had attended fewer meetings in the past 6 months than drinkers of Al-Anon attendees who attended 12-step groups ($t = -1.72, p < .05$).

4. Discussion

In this study, 57% of newcomers to Al-Anon discontinued meeting attendance within six months. This percentage is somewhat higher than the approximately 40% of individuals treated for SUDs who drop out of AA within 1 year (Kelly & Moos, 2003; Tonigan et al., 2003). The gap is not surprising in that Al-Anon newcomers may believe that their problems are not serious enough to require ongoing help, whereas treated patients are more likely to have recognized the severity of their disorder. In addition, because many treated patients have prior experience with AA (Fiorentine & Hillhouse, 2000; Timko, DeBenedetti, & Billow, 2006), they are already familiar with the AA culture, which may be associated with continued meeting attendance (Kaskutas, Subbaraman, Witbrodt, & Zemore, 2009).

During the 6-month study period, dropouts attended a mean of about one meeting per month, compared to attendees' mean of about one meeting per week. Individuals who were retained at follow-up may have attended Al-Anon from the start at the weekly frequency found beneficial to participants of AA (Fiorentine, 1999), whereas those who dropped out may not have tried at least weekly engagement with the fellowship. Studies documenting trajectories of 12-step affiliation have identified similar subgroups that either affiliate upon initiation and sustain consistent attendance, or attend at a low frequency early on and then disengage (Kaskutas, Bond, & Avalos, 2009; Morgenstern, Kahler, Frey, & Labouvie, 1996; Witbrodt et al., 2012).

4.1. Predictors of attrition

At baseline, individuals who later dropped out of Al-Anon reported less severe problems than individuals who continued to attend. More specifically, dropouts were less likely to have a diagnosed medical condition and to report being victimized by physical abuse than those who were retained in Al-Anon. Dropouts also were more likely to be satisfied with their finances and their quality of life and well-being. These findings are consistent with Andersen and Newman's (2005) framework examining determinants of medical care utilization, in which a lower level of perceived need is associated with less use of help resources. It is also consistent with prior findings that severe substance use and related life problems are associated with sustained participation in AA (Timko, Billow, & DeBenedetti, 2006; Witbrodt et al., 2012).

Dropouts were also more likely to use aspects of approach coping, which is associated with better adjustment than is avoidance coping (Taylor & Stanton, 2007). Avoidance, one aspect of which dropouts endorsed more frequently (try not to think about problems or crises), may have a positive effect when applied in the first phase of coping because it reduces anxiety and the lack of perceived control. In this vein, dropouts were more likely to report having a lot of control. However, a negative effect of avoidance coping is that it interferes with obtaining needed help (Groarke, Curtis, Coughlan, & Gsel, 2004; Kreitler, 1999).

Newcomers who later dropped out of Al-Anon were less likely to report problems in their relationship with their drinker and with their spouse or partner. They also had less phone and email contact with their drinker. Moreover, dropouts were less likely to have a lot of concern about their drinker's use of alcohol. This was true despite the lack of group differences in the frequency and quantity of the drinker's alcohol use. These findings support the idea that, compared to attendees, dropouts are more likely play down their problems and thus perceive less need for help. However, dropouts were more likely than those retained in Al-Anon to note that problems in their relationships with relatives outside their immediate family influenced their initial decision to attend meetings. Possibly, individuals who come to Al-Anon concerned about relationships that are less central to their everyday lives are more likely to discontinue attendance.

We also found that drinkers of dropouts who attended AA had attended fewer meetings; specifically, drinkers of dropouts attended a mean of 1.3 meetings per week whereas drinkers of individuals retained in Al-Anon went to a mean of 2.4 meetings per week. This finding supports the possible reciprocity between a CO's Al-Anon participation and the drinker's 12-step group participation (Roth & Tan, 2007; White & Kurtz, 2005). It also suggests that, like dropouts, drinkers of dropouts may downplay their problems and need for help.

Dropouts were less likely to have been referred to Al-Anon by their drinker's health care provider and to talk with a professional as a way to cope with problems or crises, but more likely to have been referred by Al-Anon members. The lack of referral by health care professionals may contribute to long delays between the beginning of COs' difficulties and their seeking help through Al-Anon (Timko et al., in press). Patients with SUDs who receive enhanced referrals to 12-step groups by health care providers participate more in meetings and have better outcomes (Timko, DeBenedetti, et al., 2006; Timko, Sutkowi, Cronkite,

Makin-Byrd, & Moos, 2011), and individuals referred by health care providers to behavioral health services follow through with referrals at high rates (over 80%) (Auxier et al., 2012; Healey et al., 2013). Overall, individuals are more likely to become engaged in Al-Anon when attendance is recommended by health care professionals.

Providers can assist COs by providing information about meetings, such as who attends them, their purpose, how they are conducted, and where to find them, and emphasizing that meetings are anonymous. By encouraging COs to attend at least 3 meetings before deciding whether to continue, the provider may increase the probability that COs have a positive experience and continue to attend (CSAT, 2006). Members of Al-Anon can be invited to talk with family members of drinkers in treatment programs, and providers can encourage COs connected to the same treatment program to attend meetings together so that they can reinforce and reassure one another (CSAT, 2006). Even with these recommendations, research is needed to identify how providers can play a larger role in referring COs to mutual-help (Laudet, Savage, & Mahmood, 2002).

Although our findings suggest that the problems of newcomers who drop out of Al-Anon are less severe, dropouts were more often concerned about their drinker's psychological health, specifically, his or her high stress and anxiety, low self-esteem, and unsatisfying spiritual life. Newcomers with these concerns about their drinkers may have found them to be unsuited to Al-Anon's philosophy. Al-Anon discourages trying to change the drinker and advises COs to detach from the drinker, focus on themselves, and obtain help for their own distress and related psychological difficulties.

Dropouts may have been attracted to try Al-Anon for reasons other than its core philosophy. They were more likely than attendees to report that they came to Al-Anon because meetings are at convenient times and places and are free of charge. These findings suggest that dropouts may have been looking for a "quick fix" for their problems (Klingmann, 2000; Moyers, 2011). We also speculate that dropouts, who more often endorsed Al-Anon's group format as a reason for trying the program, may have been looking for social connections that were relatively less available to them. That is, compared to ongoing attendees, dropouts less frequently reported being employed and having adult children to interact with, and had lived a fewer number of years in their present residence.

4.2. Limitations

A limitation of this study is that participants' reports about the drinkers in their lives reflect the reporter's perceptions. These perceptions may be inaccurate, especially among participants who had less contact with their drinker. In addition, the extent of self-selection bias due to Al-Anon groups and newcomers' deciding whether or not to participate in the study is unknown. Finally, we conducted multiple comparisons without adjustment, such that our findings require replication.

5. Conclusions

Although dropouts initially had less severe problems than individuals who continued to attend Al-Anon, dropouts did report high rates of problems; for example, 89% reported problems with their drinker, 56% had a lot of concern about the drinker's alcohol use, and only 44% were satisfied with their quality of life and well-being. Thus, individuals who drop out of Al-Anon may continue to have problems and needs that would benefit from ongoing help and support, particularly in light of the chronic and relapsing nature of SUDs.

Al-Anon has experienced internal and societal changes that present challenges to long-term membership. In contrast to our finding that less than one-half of drinkers of Al-Anon newcomers may be attending AA, initial Al-Anon groups consisted mainly of wives of AA members, which likely facilitated ongoing participation. Today, as results of this study suggest, newcomers to Al-Anon may be increasingly concerned

about someone with multiple addictions and/or mental health problems, while Al-Anon's focus remains to "help friends and families of alcoholics" (<http://www.al-anon.org/pdf/afamagazine.pdf>). In addition, the increased accessibility of Al-Anon resources online and via social media, together with competing demands of work and caring for both children and older parents, may decrease the likelihood of face-to-face meeting attendance. Still unknown is whether newcomers whose initial Al-Anon attendance is short-lived may return to the fellowship later for sustained participation. Clearly, long-term, prospective studies are needed to examine patterns of help-seeking and outcomes over time among people concerned about another's drinking and other substance misuse and mental health problems.

Role of funding sources

Funding for this study was provided by the NIAAA Grant 1R21AA019541-01 and by the Department of Veterans Affairs (VA) Office of Research and Development (Health Services Research & Development Service, RCS 00-001). Funders had no role in the study design; collection, analysis, or interpretation of the data; writing the manuscript; or the decision to submit the paper for publication.

Contributors

Authors CT, AL, and RM designed the study and wrote the protocol. CT and AL conducted literature searches and provided summaries of research studies. CT oversaw the statistical analyses. CT wrote the first draft of the manuscript and all authors contributed to and have approved the final manuscript.

Conflict of interest

All authors declare that they have no conflicts of interest.

Acknowledgments

The authors thank Ruth Cronkite, Lee Ann Kaskutas, and Jeffrey Roth for project guidance, and Stella Chan, Michelle Joyner, and Nicole Short for project management.

References

- Andersen, R., & Newman, J. F. (2005). Society and individual determinants of medical care utilization in the United States. *Millbank Quarterly*, 83, 1–28.
- Auxier, A., Runyan, C., Mullin, D., Mendenhall, T., Young, J., & Kessler, R. (2012). Behavioral health referrals and treatment initiation rates in integrated primary care: A collaborative care research network study. *Translational Behavioral Medicine*, 2(3), 337–344.
- Brennan, P. L., Schutte, K. K., & Moos, R. H. (2010). Patterns and predictors of late-life drinking trajectories: A 10-year longitudinal study. *Psychology of Addictive Behaviors*, 24, 254–264.
- Center for Substance Abuse Treatment (2006). *Substance abuse: Clinical issues in intensive outpatient treatment (Treatment Improvement Protocol 47)*. Rockville, MD: SAMHSA.
- Epstein, E. E., McCrady, B. S., Miller, K. J., & Steinberg, M. (1994). Attrition from conjoint alcoholism treatment: Do dropouts differ from completers? *Journal of Substance Abuse*, 6, 249–265.
- Fiorintine, R. (1999). After drug treatment: are 12-step programs effective in maintaining abstinence? *American Journal of Drug and Alcohol Abuse*, 25, 93–116.
- Fiorintine, R., & Hillhouse, M. P. (2000). Exploring the additive effects of drug misuse treatment and twelve-step involvement: Does twelve-step ideology matter? *Substance Use & Misuse*, 35, 367–397.
- Forys, K., McKellar, J., & Moos, R. H. (2007). Participation in specific treatment components predicts alcohol-specific and general coping skills. *Addictive Behaviors*, 32, 1669–1680.
- Groarke, A., Curtis, R., Coughlan, R., & Gsel, A. (2004). The role of perceived and actual disease status in adjustment to rheumatoid arthritis. *Rheumatology*, 43, 1142–1149.
- Healey, C., Morriss, R., Henshaw, C., Wadoo, O., Sajjad, A., & Scholefield, H. (2013). Self-harm in postpartum depression and referrals to a perinatal mental health team: An audit study. *Archives of Women's Mental Health*, 16, 237–245.
- Humphreys, K., Mankowski, E., Moos, R. H., & Finney, J. W. (1999). Do enhanced friendship networks and active coping mediate the effect of self-help groups on substance use? *Annals of Behavioral Medicine*, 21, 54–60.
- Kaskutas, L. A., Bond, J., & Avalos, L. A. (2009). 7-year trajectories of Alcoholics Anonymous attendance and associations with treatment. *Addictive Behaviors*, 34, 1029–1035.
- Kaskutas, L. A., Subbaraman, M., Witbrodt, J., & Zemore, S. E. (2009). Effectiveness of Making Alcoholics Anonymous Easier (MAAEZ), a group format 12-step facilitation approach. *Journal of Substance Abuse Treatment*, 37, 228–239.
- Kelly, J. F., Kahler, C. W., & Humphreys, K. (2010). Assessing why substance use disorder patients drop out from or refuse to attend 12-step mutual-help groups: The "REASONS" questionnaire. *Addiction Research and Theory*, 18, 316–325.
- Kelly, J. F., & Moos, R. (2003). Dropout from 12-step self-help groups: Prevalence, predictors, and counteracting treatment influences. *Journal of Substance Abuse Treatment*, 24, 241–250.
- Klaw, E., & Humphreys, K. (2000). Life stories of moderation management mutual help group members. *Contemporary Drug Problems*, 27, 779–803.
- Klingmann, H. (2000). To everything there is a season — Social time and clock time in addiction treatment. *Social Science & Medicine*, 51, 1231–1240.

- Kreitler, S. (1999). Denial in cancer patients. *Cancer Investigation*, 17, 514–534.
- Laudet, A. B. (2003). Attitudes and beliefs about 12-step groups among addiction treatment clients and clinicians: Toward identifying obstacles to participation. *Substance Use & Misuse*, 38, 2017–2047.
- Laudet, A. B., Magura, S., Cleland, C. M., Vogel, H. S., & Knight, E. (2003). Predictors of retention in dual-focus self-help groups. *Community Mental Health Journal*, 39, 281–290.
- Laudet, A. B., Savage, R., & Mahmood, D. (2002). Pathways to long-term recovery: A preliminary investigation. *Journal of Psychoactive Drugs*, 34, 305–311.
- Magura, S., Cleland, C. M., & Tonigan, J. S. (2013). Evaluating Alcoholics Anonymous's effect on drinking in Project MATCH using cross-lagged regression panel analysis. *Journal of Studies on Alcohol and Drugs*, 74, 378–385.
- Majer, J., Droege, J., & Jason, L. (2012). Coping strategies in 12-step recovery: More evidence for categorical involvement. *Journal of Groups in Addiction & Recovery*, 7, 3–14.
- Mankowski, E. S., Humphreys, K., & Moos, R. H. (2001). Individual and contextual predictors of involvement in twelve-step self-help groups after substance abuse treatment. *American Journal of Community Psychology*, 29, 537–563.
- McCrary, B. S. (1998). Recent research on twelve step programs. In A. W. Graham, T. K. Schultz, & B. B. Wilford (Eds.), *Principles of addiction medicine* (pp. 707–718) (2nd ed.). Chevy Chase, MD: American Society of Addiction Medicine, Inc.
- McCrary, B. S., Epstein, E. E., & Hirsch, L. S. (1996). Issues in the implementation of a randomized clinical trial that includes Alcoholics Anonymous: Studying AA-related behaviors during treatment. *Journal of Studies on Alcohol and Drugs*, 57, 604–612.
- Miller, R. M., Meyers, R. J., & Tonigan, J. S. (1999). Engaging the unmotivated in treatment for alcohol problems: A comparison of three strategies for intervention through family members. *Journal of Consulting and Clinical Psychology*, 67, 688–697.
- Moos, R. H., Cronkite, R., & Finney, J. (1992). *Health and daily living form manual* (2nd ed.). Redwood City, CA: Mind Garden.
- Moos, R. H., & Moos, B. S. (2007). Treated and untreated alcohol-use disorders: Course and predictors of remission and relapse. *Evaluation Review*, 31, 564–568.
- Morgenstern, J., Kahler, C. W., Frey, R. M., & Labouvie, E. (1996). Modeling therapeutic response to 12-step treatment: Optimal responders, nonresponders, and partial responders. *Journal of Substance Abuse*, 8, 45–59.
- Moyers, W. C. (2011). *Beyond addiction: Improving our understanding of alcohol and drug addiction*. Center City, MN: Hazelden.
- O'Farrell, T. J., & Fals-Stewart, W. (2001). Family-involved alcoholism treatment. An update. *Recent Developments in Alcohol*, 15, 329–356.
- O'Farrell, T. J., & Clements, K. (2012). Review of outcome research on marital and family therapy in treatment for alcoholism. *Journal of Marital and Family Therapy*, 38, 122–144.
- Ouimette, P., Humphreys, K., Moos, R. H., Finney, J. W., Cronkite, R., & Federman, B. (2001). Self-help group participation among substance use disorder patients with posttraumatic stress disorder. *Journal of Substance Abuse Treatment*, 20, 25–32.
- Roth, J. (2004). *Group psychotherapy and recovery from addiction: Carrying the message*. Binghamton, NY: Haworth Press.
- Roth, J. D., & Tan, E. M. (2007). Analysis of an online Al-Anon meeting. *Journal of Groups in Addiction & Recovery*, 2, 5–39.
- Roth, J. D., & Tan, E. M. (2008). Spirituality and recovery from familial aspects of alcohol and other drug problems: Analysis of an online Al-Anon meeting. *Alcohol Treatment Quarterly*, 26, 399–426.
- Taylor, S. E., & Stanton, A. L. (2007). Coping resources, coping processes, and mental health. *Annual Review of Clinical Psychology*, 3, 377–401.
- Timko, C., Billow, R., & DeBenedetti, A. (2006). Determinants of 12-step group affiliation and moderators of the affiliation–abstinence relationship. *Drug and Alcohol Dependence*, 83, 111–121.
- Timko, C., Cronkite, R., Kaskutas, L. A., Laudet, A., Roth, J., & Moos, R. H. (2013). Al-anon family groups: Newcomers and members. *Journal of Studies on Alcohol and Drugs*, 74, 965–976.
- Timko, C., Cronkite, R., Laudet, A., Kaskutas, L. A., Roth, J., & Moos, R. H. (2013). Al-Anon family groups' newcomers and members: Concerns about the drinkers in their lives. *The American Journal on Addictions* (in press).
- Timko, C., Cronkite, R. C., Swindle, R., Robinson, R. L., Sutkowi, A., & Moos, R. H. (2009). Parental depression as a moderator of secondary deficits of depression in adult offspring. *Child Psychiatry and Human Development*, 40, 575–588.
- Timko, C., DeBenedetti, A., & Billow, R. (2006). Intensive referral to 12-step self-help groups and six-month substance use disorder outcomes. *Addiction*, 101, 678–688.
- Timko, C., Sutkowi, A., Cronkite, R., Makin-Byrd, K., & Moos, R. (2011). Intensive referral to 12-step dual-focused mutual-help groups. *Drug and Alcohol Dependence*, 118, 194–201.
- Tonigan, J. S., Connors, C. J., & Miller, W. R. (2003). Participation and involvement in Alcoholics Anonymous. In T. Babor, & F. DelBoca (Eds.), *Treatment matching in alcoholism* (pp. 184–204). NY: Cambridge University Press.
- White, W., & Kurtz, E. (2005). *The varieties of recovery experience: A primer for addiction treatment professionals and recovery advocates*. Chicago, IL: Great Lakes Addiction Technology Transfer Center.
- Witbrodt, J., Mertens, J., Kaskutas, L. A., Bond, J., Chi, F., & Weisner, C. (2012). Do 12-step meeting attendance trajectories over 9 years predict abstinence? *Journal of Substance Abuse Treatment*, 43, 30–43.