PMCID: PMC2727692 NIHMSID: NIHMS80062

Alcohol Treat Q. Author manuscript; available in PMC 2009 Sep 18. Published in final edited form as:

Alcohol Treat Q. 2009 Jan 1; 27(1): 38–50. doi: 10.1080/07347320802586726

Helping Others and Long-term Sobriety: Who Should I Help to Stay Sober?

MARIA E. PAGANO, PhD, BRIE B. ZELTNER, BA, JIHAD JABER, BA, STEPHEN G. POST, PhD, WILLIAM H. ZYWIAK, PhD, and ROBERT L. STOUT, PhD

MARIA E. PAGANO, Case Western Reserve University School of Medicine, Cleveland, Ohio; Contributor Information.

Address correspondence to Dr. Maria E. Pagano, Case Western Reserve University, Department of Psychiatry, Division of Child Psychiatry, 11100 Euclid Avenue, Cleveland, OH44106. E-mail: maria.pagano@case.edu

Copyright notice and Disclaimer

See other articles in PMC that cite the published article.

Abstract Go to:

Examination of the change strategies associated with successful long-term sobriety remains an understudied area in addiction research. The following study recruited individuals with long-term sobriety (range 16–25 years continuous abstinence). Subjects (n = 11 were surveyed on demographic information, problem history, Alcoholics Anonymous (AA) affiliation, and helping behaviors within several life domains over the course of sobriety. General helping behaviors increased from lower levels in the month prior to getting sober, to moderate levels at 1 year of sobriety, but did not continue to increase with additional years of sobriety. Levels of general help to others at home, work, and 12-step programs were similar at varying lengths of sobriety. Whereas overall levels of general help given to others were similar across settings, helping other alcoholics, as opposed to helping others at home or work, was rated as contributing the most to staying sober. Across time, alcoholics increased participation in helping behaviors specific to 12-step programs. The utility of helping others as a behavioral strategy to maintain successful addictive behavioral change is discussed.

INTRODUCTION Go to:

Research in social and cognitive sciences has shown increasing evidence for the long-held idea that helping others provides a therapeutic benefit to the helper. The mental health benefits of helping others have been well documented: mood improves, depression and anxiety decrease, self-esteem increases, and purpose in life is enhanced (Hunter & Lin, 1981; Lawler et al., 2003; Schwartz, Meisenhelder, Ma, & Reed, 2003; Schwartz & Sendor, 1999). Helping others has also been associated with physical benefits such as decreased physical limitations on functioning (Luoh & Herzog, 2002; Morrow-Howell, Hinterlonh, Rozario, & Tang, 2003) and increased longevity (Oman, Thoresen, & McMahon, 1999). A small but significant study suggests that the mental health benefits of helping others more than double when the helper helps another with the same chronic disease (Schwartz & Sendor, 1999). The benefit of helping to the helper may be stronger depending upon the relevance of the service activities to the helper.

American history traces the legacy of helpers within the context of recovery from addiction. From the Native American cultural revitalization movements in the late 18th century to modern mutual aid movements in the 21st century, sober alcoholics have long been recognized for the unique healer role they provide to others who suffer from the disease of addiction (White, 2000a). The experiential knowledge, unrelenting crusade to help fellow sufferers, and tangible hope to recover from a devastating chronic illness allows recovering alcoholics to reach fellow sufferers in ways unattainable by nonalcoholic helpers (White, 2000b). While the benefits to recipients of the help received by recovering alcoholics have been well recognized, the health benefits to the alcoholic helper remain relatively unexplored.

Alcoholics Anonymous (AA) has long emphasized the importance of helping other alcoholics, and empirical work is beginning to surface to support this position (Pagano, Friend, Tonigan, & Stout, 2004; Pagano, Phillips, Stout, Menard, & Pilliavin, 2007; Zemore, Kaskutas, & Ammon, 2004). Originating in Akron, Ohio in 1935, AA's primary purpose is for members to stay sober and to help others to recover from alcoholism. The mechanism of action of helping behavior is outlined in the basic text of AA: the root of the disease lies in egocentrism. By getting out of self, the alcoholic reduces self-absorption and self-pity each time (s)he shifts the focus from self to others. Investigators have dubbed this mechanism "response shift," and use it to explain the stunning positive effect this peer support has on the givers' quality of life (Schwartz, 1999).

Helping behavior in Alcoholics Anonymous, most clearly expressed in the 12th step, often means becoming a sponsor to another alcoholic. A sponsor typically has been sober for a year or more, but it is important to note that helping behavior within the context of AA is not limited to the formal role of sponsorship. Informal helping behavior occurs earlier in the process of recovery, such as putting out coffee, cleaning up after meetings, or listening to another alcoholic's problems that day. Outside the context of AA, there are many opportunities for helping others, such as at home or work. There is some evidence to suggest that the help given to others initially in AA begins to extend to other life domains outside of 12-step contexts among alcoholics with long-term sobriety (Kurtz & Fisher, 2003). Whether helping others outside of 12-step contexts provides the same benefit to sobriety that alcoholics get from helping fellow sufferers remains unclear.

Given the prominence of helping others in the AA literature and the well-documented health benefits to the helper, it is surprising that very few empirical studies have examined the beneficial impact of helping on drinking outcomes. The first longitudinal investigation in Project MATCH found that alcoholics who helped others during treatment were twice as likely to have maintained sobriety 1 year following treatment compared to nonhelpers (Pagano et al., 2004). A second investigation demonstrated the importance of helping others during treatment to increased AA involvement following treatment (Zemore et al., 2004). This finding is important, given the challenge of engaging alcoholics with community-based resources to withstand the high-risk period of relapse following treatment. A third naturalistic study of adults with comorbid substance use and body dysmorphic disorders (a severe mental illness characterized by preoccupation with a real or imagined physical defect) found that helpers were twice as likely to achieve sobriety in the absence of a formal treatment intervention (Pagano et al., 2007).

Although prior work represents strides toward quantifying helping behaviors, understanding how helping operates among alcoholics in recovery is in its infancy. Because investigations of the benefits of helping behaviors to sobriety have been limited by relatively short-term follow-up, it is unclear if helping behaviors in early recovery are similar to helping behaviors with many years of sobriety. Helping others at meetings or in treatment settings, while important, may not capture the service involvement of old-timers outside of these settings. As years from the last drink accrue, alcoholics in recovery may attend fewer AA meetings (Tonigan, Conners, & Miller, 2003). Helping behaviors at AA meetings (e.g., making coffee, etc.) may be more frequent in the initial years of sobriety; involvement

in other types of service work, such as helping others with step work, may be more frequent as experience increases with continuous sobriety. As alcoholics stay sober, do they engage at similar levels and avenues of helping others?

The limited knowledge of the course of helping behaviors to sustained recovery is coupled with a lack of valid measurement of helping behaviors pertinent to the daily lives of alcoholics. No existing measure of helping behaviors among alcoholics in recovery has been validated (for a review, see Zemore & Pagano, in press), resulting in little consensus of the types of helping that matter the most to alcohol outcomes. Can the helper benefit to sustained sobriety manifest from helping others at work, or is the salience of the helping drawn from aid to a fellow sufferer? Intralevel comparison of helping behaviors commonly expressed across life domains is needed to test whether the helping benefit is context bound. If context matters for the helper benefit of sustained sobriety, the next step that follows is to identify the domain-specific helping behaviors linked to sustained sobriety. This exploratory work was a natural extension of prior work (Pagano et al., 2004) to explore helping behaviors in multiple areas of an alcoholic's life from early to long-term sobriety. A small case study and cross-sectional design covering a range of 20 years of sobriety was utilized, a recommended quasi-experimental approach for preliminary process research in AA (Beutler, Jovanovic, & Williams, 1995). Using selfreport data completed by a sample of 11 AA members with an average of 20 years of sobriety, this study addresses two main questions: (a) What are the patterns of helping behaviors in multiple life domains at different stages of sobriety? and (b) Does helping alcoholics versus nonalcoholics equally contribute to staying sober?

METHOD Go to:

Subjects

Subjects were recruited for the study from an alumni membership of a treatment facility in southeastern Michigan. Initial criteria for inclusion were (a) having a minimum of 10 years of sobriety in AA; (b) English speaking and at least 6th grade reading level; (c) medically stable; and (d) a diagnosis of alcohol dependence at time of treatment. Five of the 16 subjects contacted were unable or unwilling to participate due to insufficient time. Participants received a packet of self-report questionnaires and a self-addressed return envelope to the data coordinating site. After a follow-up telephone call to two subjects, completed study materials were received from all study participants. This study was approved by the Institutional Review Board of the Pacific Institute for Research and Evaluation (Providence, RI), and study participants provided voluntary written informed consent, Data were collected from February 2005 to November 2006.

Assessments

Sociodemographic/clinical characteristics The intake form obtained data on demographic characteristics (gender, race, religion, marital status, living situation, education, age), retrospective data on clinical characteristics of alcohol abuse (date of last drink, number of drinks on last drinking day), and information on Alcoholics Anonymous involvement (meeting attendance, providing sponsorship, step work).

Helping others After completing the intake form, participants were asked to complete the "Helping Others" questionnaire (see <u>Table 1</u>). Nine items assessed other-oriented behaviors common to daily life interactions with others in three domain settings: (a) home, (b) work, and (c) 12-step programs. These assessment items of general helping were drawn from pilot focus groups with AA members to identify helping behaviors applicable to daily life across multiple contexts (report of pilot work available upon request). Using a 5-point Likert scale from 1 (rarely) to 5 (always), genera! helping items were rated with reference to a specific life setting. After reverse scoring three items, the nine items are summed

for a total score of general helping to others within a specific setting (range 9–45). After completing items of general helping to others within a life setting (initially the home setting), participants were asked to rate overall how much helping others within the setting helped them to stay sober. The one item of overall contribution rating of domain-specific helping to staying sober was rated on a 4-point Likert scale from 1 (little) to 4 (a lot). Participants completed the general helping scale and overall contribution item initially with reference to the home setting, following by the contexts of work, and lastly 12-step programs.



TABLE 1
Helping Others Questionnaire

Following the completion of ratings of general helping to others in the last context of 12-step programs, participants were asked to complete three additional items within the context of 12-step programs. These questionnaire items were included based on empirical evidence of their association with abstinence (Emrick. 1987; Emrick, Tonigan, Montgomery, & Little, 1993). Using a 5-point Likert scale from 1 (rarely) to 5 (always), subjects rated participation levels in three service-oriented behaviors specific to 12-step programs: helping in service commitment tasks at meetings, helping others with step work, and providing sponsorship to others.

Participants completed the "Helping Others" questionnaire with reference to three time intervals: (a) the last drinking day prior to treatment, (b) the month celebrating 1 year of sobriety, and (c) the past month with 20 years of sobriety. Using the past month interval rating, general helping scale scores for home, work, and 12-step programs demonstrated adequate internal consistency (home α = .77, work α = .80, 12-step α = .82) and feasibility (less than 10 minutes to complete), Intercorrelations between the three items assessing helping specific to 12-step programs were significant (r = .59–.70). However, only the association between providing sponsorship and assisting others with step work was of any magnitude (r = .70), suggesting the distinctiveness of each service-oriented behavior specific to 12-step programs.

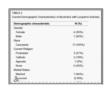
Statistical Analysis

Random effects mixed models for repeated measurements were conducted to examine differences in the levels of service given to family members, coworkers, and AA community members across time. Fixed-effects estimators included gender, marital status, and gender by marital status interaction using a compound symmetry within-subject variance—covariance matrix. Degrees of freedom for the *F* test were computed using the Satterthwaite formula, a method that provides a more accurate approximation to the distribution of the *F* statistic in random effects models than the standard analysis of variance (ANOVA) method (Dmitrienko, Molenberghs, Chuang-Stein, & Offen, 2005). The Fishers exact test was used to compare dichotomous outcomes. To reduce the chances of Type I error, the set of tests performed for the two study hypotheses were considered statistically significant if the two-sided *p* value was less than .005. All analyses were performed with SAS software (Version 9.1.2; SAS Institute, Cary, NC).

RESULTS Go to:

<u>Table 2</u> shows the demographic profile of the sample in the month prior to interview. The majority of study participants were male (65%) and Caucasian (100%). Approximately half of participants (54%) were currently practicing a formal religion. Sixty-four percent were married and living together with children. Eighteen percent had a 4-year college degree and 27% had a post-graduate degree. All participants were married and employed at the time of their last drink, one year of sobriety, and 20

years of sobriety. Participants were on average 57 years of age (SD = 12.3) and had 22.4 years of sobriety (SD = 2.1). Drinking severity on the last day of drinking was substantial, with an average of 13.6 drinks. Participants reported a high lifetime number of AA meetings, and a current weekly attendance of two or more AA meetings. Eighty-three percent were currently sponsoring other alcoholics. Approximately half of participants (45%) rated Step Four as the most difficult of the 12 steps to work.



<u>TABLE 2</u>
Current Demographic Characteristics of Alcoholics with Long-term Sobriety

Course of General Helping

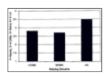
Table 3 presents the random effects regression results comparing general helping levels across time and setting. Random effects analyses uncovered significant differences by time [F(2, 60) = 15.9, p < .0001]. In contrast, no domain [F(2, 60) = 0.7, p = .77] or domain by time [F(4, 60) = 0.9, p = .49] differences in levels of general helping were found. As shown in Table 3, examination of mean general helping levels at each time interval revealed a quadratic time pattern of general helping. Averaged across settings, levels of general helping to others were significantly lower at the time of the last drink in comparison to levels at 1 year of sobriety (M = 24.8 versus M = 33.1, respectively, p < .0001) and 20 years of sobriety (M = 24.8 versus M = 32.9, respectively, p < .0001). There were no significant differences between levels of general helping at 1 year of sobriety and 20 years of sobriety (M = 33.1 versus M = 32.9, respectively, p = .89). As shown in Table 3, levels of general helping were similar across setting at each time interval.



TABLE 3
Helping Others Within Settings Over Time

Contribution of Domain-Specific Helping to Staying Sober

Figure 1 shows overall contribution ratings of domain-specific helping to staying sober. In contrast to a lack of differences in general helping levels across settings, ratings of the helping benefit to sobriety differed depending upon the context where help was given [F(2, 60) = 7.7, p < .001]. No time [F(2, 60) = 2.3, p = .10] or setting by time [F(4, 60) = 1.3, p = .27] differences were found in ratings of the helping contribution to sobriety. Helping others in 12-step programs was consistently rated at higher levels of overall contribution to sobriety in comparison to helping others at home (M = 3.5 versus M = 2.8, respectively, p < .001) or work (M = 3.5 versus M = 2.7, respectively, p < .001).



How much helping at home, work and AA helps the helper stay sober

Helping Specific to 12-Step Programs

Because helping others in 12-step programs was rated significantly higher in overall contribution to staying sober, exploratory analyses were conducted with participation levels in helping behaviors specific to 12-step members. Results of random effects analyses revealed significant time differences for helping behaviors specific to 12-step programs: providing sponsorship [F(2, 64) = 17.3, p < .0001]; service commitment [F(2, 61) = 11.7, p < .0001]; and step work with others [F(2, 61) = 19.5, p < .0001]

.0001]. Table 3 illustrates levels of 12-step-specific helping at the time of the last drink, 1 year sober, and 20 years sober. For each item of helping specific to 12-step programs, a linear pattern of increased helping from the prior time interval was found, with one exception. Levels of helping with service commitment tasks at 1 year of sobriety were similarly rated at "sometimes" thresholds at 1 year sober and 20 years sober (M = 3.2 yersus M = 3.4, respectively, p = .55).

DISCUSSION Go to:

This study examines helping behaviors of recovering alcoholics with more than 20 years of sobriety. This sample of adults with remarkable lengths of time from their last drink was relatively homogeneous in background and high involvement with 12-step programs. A consistent time pattern pertaining to levels of general help to others emerged from this study. Sober alcoholics were significantly more helpful to others at home, work, and in 12-step programs than they had been while drinking. What can account for the first pattern of a marked shift toward increased other-person orientation in conjunction with success in not picking up a drink? The mechanism of change brought on by helping may lie in AA's description of egocentrism as the root cause of the alcohol problem (Alcoholics Anonymous, 1984). Helping others removes the focus from oneself, even temporarily, decreasing the self-absorption that often accompanies substance abuse disorders. Empirical evidence of this effect is beginning to emerge. In a recent study of comorbid psychiatric disorders, the authors found that alcoholics were more likely to have a history of Antisocial Personality Disorder (ASPD). T however, recovered alcoholics with long-term sobriety no longer met the criteria for ASPD (Di Sciafani, Finn, & Fein, 2007). Future investigations of changes in antisocial behaviors in relation to helping behaviors among individuals with substance use disorders are warranted.

The second pattern that emerged from this study pertains to the course of general versus AA-specific helping behaviors. Lower levels of general helping while drinking increased to moderate levels at 1 year and 20 years sober. This finding parallels the pattern found in a similar study of 17 alcoholics with 20.7 years sobriety and long histories of AA participation. Kurtz and Usher (2003) noted a gradual progression of community activities that followed involvement in 12-step organizations. Thus involvement in AA contexts appears to lead to external involvement in other life settings. In contrast to sustained moderate levels of community life participation across early and long-term sobriety. AA service involvement after several decades of sobriety was higher than levels reported in early sobriety. This suggests that participation levels in some AA service activities may he higher as more experience is accrued with time sober. Supplementing this finding, recovering alcoholics consistently rated helping other alcoholics as contributing a lot to staying sober, whereas helping at home or work contributed very little. In a similar study, very few old-timers (29%) mentioned staying sober as their motive for community involvement (Kurtz & Fisher, 2003).

There are several possible mechanisms to explain why helping behaviors within 12-step programs are critical to sustaining sobriety. First, helping other alcoholics in the AA community provides "helper therapy" (Reissman, 1965), in which the alcoholic who is giving support to a fellow sufferer benefits from the interaction as well. Reissman hypothesized that the benefit may derive from improved self-image, and from becoming committed to a position (staying sober) by advocating it to another. When the idea of having a drink occurred to Dr. Bob, cofounder of AA, he took it as a sign that he hadn't been paying enough attention to the men in the ward at St. Thomas (Alcoholics Anonymous, 1980, p. 76). Helping other alcoholics provides not only the motivation to stay sober, but may increase self-efficacy in the process. Recent evidence demonstrates higher self-efficacy among those who help others in recovery (Zemore & Pagano, 2007). Because alcoholics remain susceptible to relapse long after their last drink, helping other alcoholics may enhance one's ability to resist taking a drink or drug. Future research is needed to explore self-efficacy in relation to service activities.

There are several limitations of this study that should be noted. First, small samples, as in this study, are not random and cannot he considered representative reflections of all recovered alcoholics with long-term sobriety. Second, the general exploratory nature of the study precluded experimental and prospective methods; thus our results can only provide associations. Third, whether long-term sobriety is contingent upon sustained, if not increased, levels of helping behaviors remains to be tested in future longitudinal investigations that include individuals with varying lengths of sobriety. Fourth, while internal consistency in the present study was demonstrated, future investigations of additional psychometric properties of the "Helping Others" questionnaire among a diverse sample is needed. Finally, all participants had received Twelve-Step Facilitated CTSF) outpatient treatment before getting sober. Thus these findings may not be applicable to members of 12-step organizations who have not attended formal treatment or were treated at facilities with a different clinical orientation.

Despite these limitations, our study offers a unique contribution to the literature for several reasons, including the use of a precise and efficient sampling strategy, comprehensive measurement of giving service in multiple domains of life, and a perspective of the course of AA involvement from the vantage point of decades-long sobriety.

Clinical Implications

Longitudinal studies of volunteers have shown that once people decide to help others, a large percentage of them remain volunteers for several years (Finkelstein & Penner, 2004). It is not surprising, therefore, that alcoholics who "catch the spark" early on in treatment maintain and even increase their helping behaviors as the length of their sobriety increases. Family members, who may complain about the frequent helping given to other alcoholics, may benefit from a broader understanding of the importance of 12-step service to maintaining sobriety. The "Helping Others" questionnaire provides a way to identify alcoholics in treatment with low levels of helping behaviors as well as a prompt of accessible ways to help others in and outside of the 12-step program.

Acknowledgments

Go to:

This research was supported by grant K01 AA015137-02 from the National Institute of Alcohol and Alcoholism to Dr. Pagano. Analyses and manuscript preparation were made possible through the generous support of the Department of Psychiatry. Case Western Reserve University, Cleveland, OH, and the Decision Sciences Institute, Pacific Institute for Research and Evaluation, Providence, RI.

Footnotes Go to:

This research is based on a modification of a poster presented at the 30th Annual Meeting of the Research Society on Alcoholism in Chicago, IL (Pagano, M. E., Jaber, J., Kotz, M. M., Dean, R., & Zywiak, W. H., 2007).

Contributor Information

Go to:

MARIA E. PAGANO, Case Western Reserve University School of Medicine, Cleveland, Ohio.

BRIE B. ZELTNER, Case Western Reserve University School of Medicine, Cleveland, Ohio.

JIHAD JABER, Case Western Reserve University School of Medicine, Cleveland, Ohio.

STEPHEN G. POST, Case Western Reserve University School of Medicine, Cleveland, Ohio.

WILLIAM H. ZYWIAK, Brown University, and the Pacific Institute for Research and Evaluation, Providence, Rhode Island.

ROBERT L. STOUT, Brown University, and the Pacific Institute for Research and Evaluation, Providence, Rhode Island.

References Go to:

1. Alcoholics Anonymous. Dr. Bob and the good oldtimers: A biography, with recollections of early A.A. in the Midwest. New York: Alcoholics Anonymous World Services; 1980.

- 2. Alcoholics Anonymous. Twelve steps and twelve traditions. New York: Alcoholics Anonymous World Services; 1984.
- 3. Beutler LE, Jovanovic J, Williams RE. Process research perspectives in Alcoholics Anonymous: Measurement of process variables. In: McCrady BS, Miller WR, editors. Research on Alcoholics Anonymous. New Brunswick, NJ: Rutgers Center of Alcohol Studies; 1995. pp. 397–430.
- 4. Di Sciafani V, Finn P, Fein G. Psychiatric comorbidity in long-term abstinent alcoholic individuals. Alcoholism: Clinical and Experimental Research. 2007;31:795–803.

 [PMC free article] [PubMed]
- 5. Dmitrienko A, Molenberghs G, Chuang-Stein C, Offen W. Analysis of clinical trials using SAS: A practical guide. Cary, NC: SAS Institute; 2005.
- 6. Emrick CD. Alcoholics Anonymous; Affiliation processes and effectiveness as treatment. Alcoholism: Clinical & Experimental Research. 1987;11(5):416–423. [PubMed]
- 7. Emrick CD, Tonigan JS, Montgomery H, Little L. Alcoholics Anonymous: What is currently known? In: McCrady BS, Miller WR, editors. Research on Alcoholics Anonymous: Opportunities and alternatives. New Brunswick, NJ: Rutgers Center of Alcohol Studies; 1993. pp. 41–78.
- 8. Finkelstein MA, Penner LA. Predicting organizational citizenship behavior: Integrating the functional and role identity approaches. Social Behavior and Personality: An International Journal. 2004;32:383–398.
- 9. Hunter KL, Lin MW. Psychosocial differences between elderly volunteers and non-volunteers. International journal of Aging and Human Development. 1981;12:205–213. [PubMed]
- 10. Kurtz LF, Fisher K. Participation in community life by AA and NA members. Contemporary Drug Problems. 2003;30:875–904.
- 11. Lawler KA, Youner JW, Piferi RL, Billington E, Jobe R, Edmudson K, et al. A change of heart: cardiovascular correlates of forgiveness in response to interpersonal conflict. Journal of Behavioral Medicine. 2003;26:373–393. [PubMed]
- 12. Luoh MC, Herzog AR. Individual consequences of volunteer and paid work in old age: Health and mortality. Journal of Health and Social Behavior. 2002;43:490–509. [PubMed]
- 13. Morrow-Howell N, Hinterlonh J, Rozario PA, Tang F. Effects of volunteering on the well-being of older adults. Journals of Gerontology Series B—Psychological Sciences: Social Sciences. 2003;58:S137–S145. [PubMed]
- 14. Oman D, Thoresen E, McMahon K. Volunteerism and mortality among the community-dwelling elderly. Journal of Health Psychology. 1999;4:301–316. [PubMed]
- 15. Pagano ME, Friend KB, Tonigan JS, Stout RL. Helping other alcoholics in Alcoholics Anonymous and drinking outcomes: Findings from Project MATCH. Journal of Studies on Alcohol. 2004;65:766–773. [PMC free article] [PubMed]
- 16. Pagano ME, Jaber J, Kotz MM, Dean R, Zywiak WH. Helping behaviors by alcoholics with long-term sobriety; Poster presentation at the 30th Annual Meeting of the Research Society on Alcoholism; Chicago, IL. 2007.
- 17. Pagano ME, Phillips KA, Stout RL, Menard W, Pilliavin JA. Impact of helping behaviors on the course of substance-use disorders in individuals with body dysmorphic disorder. Journal of Studies on Alcohol and Drugs. 2007;68:1–5. [PMC free article] [PubMed]
- 18. Reissman F. The "helper" therapy principle. Social Work. 1965;10:27–32.
- 19. Schwartz CE. Teaching coping skills enhances quality of life more than peer support: Results of a randomized trial with multiple sclerosis patients. Health Psychology. 1999;18:211–220.

 [PubMed]

- 20. Schwartz CE, Meisenhelder JB, Ma Y, Reed G. Altruistic social interest behaviors are associated with better mental health. Psychosomatic Medicine. 2003;65:778–785. [PubMed]
- 21. Schwartz CE, Sendor RM. Helping others helps oneself: Response shift effects in peer support. Social Science and Medicine. 1999;48:1563–1575. [PubMed]
- 22. Tonigan JS, Connors GJ, Miller WR. Participation and involvement in Alcoholics Anonymous. In: Babor TF, Del Boca FK, editors. Treatment matching in alcoholism. New York: Cambridge University Press; 2003. pp. 184–204.
- 23. White WL. History of recovered people as wounded healers: I. From Native America to the rise of the modern alcoholism movement. Alcoholism Treatment Quarterly. 2000;18(1):1–23.
- 24. White WL. History of recovered people as wounded healers: II. Era of professionalization and specialization. Alcoholism Treatment Quarterly. 2000;18(2):1–25.
- 25. Zemore SE, Kaskutas LE, Ammon LN. In 12-step groups, helping helps the helper. Addiction. 2004;99:1015–1023. [PubMed]
- 26. Zemore SE, Pagano ME. Time-varying predictors of helping behaviors among individuals in treatment for alcohol use disorders: Findings from Project MATCH; Poster presentation at the 30th Annual Meeting of the Research Society on Alcoholism; Chicago, IL. 2007.
- 27. Zemore SE, Pagano ME. Kickbacks from helping others: Health and recovery. In: Galanter M, Kaskutas L, editors. Recent developments in alcoholism. Vol. 10. New York: Plenum; in press. [PubMed]