

Published in abridged form in: White, W., Campbell, M.D., Shea, C., Hoffman, H.A., Crissman, B. & DuPont, R.L. (2013). Co-participation in 12 Step mutual aid groups and methadone maintenance treatment: A survey of 322 patients. *Journal of Groups in Addiction and Recovery*, 8(4), 294-308.

Co-participation in 12-Step Mutual Aid Groups and Methadone Maintenance Treatment: A Survey of 322 Patients

William L. White, MA; Michael D. Campbell, PhD; Corinne Shea, MA; Howard A. Hoffman, MD; Brian Crissman, & Robert L. DuPont, MD¹

Abstract. In spite of more than four decades of scientific research confirming the efficacy and effectiveness of methadone maintenance treatment (MMT) as a treatment for chronic opioid addiction, MMT patients have faced considerable public and professional stigma and unique obstacles to participation in mainstream addiction recovery mutual aid groups. This study reports the levels of Narcotics Anonymous (NA) and/or Alcoholics Anonymous (AA) participation among 322 patients enrolled in MMT in an urban community in the Northeastern United States. Survey results reveal high rates of past year NA/AA participation (66%), high rates of self-reported helpfulness of AA and NA (72-77%), but much lower rates of participation in key 12-Step program ingredients: having a home group (50%), having a sponsor (26%), sponsoring others (13%), attending 12-step social events (23%), and active step work (21%). One-quarter (25%) of NA/AA-involved patients reported a negative experience within NA or AA related to their MMT patient status. Only 34% of patient NA/AA members disclosed their MMT status to their sponsors and at meetings.

Key Words. Methadone maintenance treatment, Alcoholics Anonymous, Narcotics Anonymous, Methadone Anonymous, medication-assisted treatment, medication-assisted recovery, recovery mutual aid

Introduction

Methadone maintenance treatment (MMT) has been a primary modality for the treatment of opioid addiction for more than four decades. MMT's safety, efficacy, and effectiveness have been rigorously tested and affirmed by innumerable studies and scientific panels (Kleber, 2008; Kreek & Vocci, 2002; National Consensus Development Panel, 1998; National Institute on Drug Abuse, 1999). There are currently 1,203 opioid treatment programs (OTPs) in the United States with a collective daily treatment capacity of more than 260,000 patients (Parrino, 2008). In spite of its potentially positive effects on numerous areas of personal functioning, MMT, like other

¹ William L. White (bwhite@chestnut.org) is a Senior Research Consultant at Chestnut Health Systems. Michael D. Campbell, PhD. Corinne L. Shea, and Robert L. DuPont serve respectively as Research Specialist, Director of Communications, and President of the Institute for Behavior and Health. Howard A. Hoffman, M.D, is the Medical Director and Brian Crissman is the Program Director at Partners in Drug Abuse Rehabilitation and Counseling (PIDARC).

addiction treatment modalities, is limited by high rates of patient attrition prior to the achievement of maximum benefit.

MMT was originally conceptualized as a prolonged and potentially lifelong treatment for opioid addiction (Dole & Nyswander, 1967; Dole, Nyswander, & Kreek, 1966). Evidence confirms that MMT outcomes improve with the duration of treatment, including long-term outcomes for those patients who eventually cease MMT participation (Dole, 1994). Idealized views of the optimal time in medication-assisted treatment are challenged by seven stark realities:

- 1) Between 80-100% of surveyed MMT patients expect to end MMT at some time in the future (Langrod, Des Jarlais, Alksne, & Lowinson, 1983; Stancliff, Myers, Steiner, & Drucker, 2002).
- 2) One-year retention rates in MMT are less than 50% (Deck & Carlson, 2005).
- 3) Only a small percentage of MMT patients end their treatment in a planned manner (11% of those discharged in 2005; Substance Abuse and Mental Health Services Administration, 2008).
- 4) Post-treatment monitoring, support, and early re-intervention are not standard practices within mainstream addiction treatment or within OTPs in the United States (White & Torres, 2010).
- 5) The majority of patients who are discharged from MMT eventually return to heroin or other illicit opioid use (Gossop, Green, Phillips, & Bradley, 1989; Joseph, Stancliff, & Langrod, 2000; Magura & Rosenblum, 2001).
- 6) Patients who end MMT are at significantly increased risk of infectious disease and death following treatment termination (Clausen, Ancherson, & Waal, 2008).
- 7) The majority of MMT patients who choose to taper from MMT do not successfully complete the tapering process as planned (Calsyn, Malcy, & Saxon, 2006; Nosyk et al., in press).

These findings underscore the potential importance of non-pharmacological recovery supports for MMT patients during induction and treatment, while tapering, and following treatment, and they underscore the more specific role participation in recovery mutual aid groups could potentially play in long-term recovery from opioid addiction (Gossop, Stewart, & Marsden, 2008). There is substantial evidence that participation in recovery mutual aid organizations like Alcoholics Anonymous (AA) exert positive effects on long-term recovery outcomes (For reviews, see Kaskutas, 2009; Kelly & Yeterian, 2008; White, 2009), but non-pharmacological support during MMT has historically relied on ancillary psychosocial supports provided within OTPs (McLellan, Arndt, Metzger, Woody, & O'Brien, 1993) rather than on linking patients to community-based recovery mutual aid organizations like AA, Narcotics Anonymous (NA), or other recovery mutual aid groups (White & Torres, 2010).

Attempts to apply 12-Step approaches to MMT treatment (Obuchowsky & Zweben, 1987; Ronel, Gueta, Abramsohn, Caspi, & Adelson, 2011; Zweben, 1987) have faced obstacles related to professional attitudes toward 12-Step groups (Laudet & White, 2005) and the acceptance of MMT patients within 12-Step groups, e.g., restrictions on MMT patients' right to claim "clean time," speak at meetings, sponsor others, or hold service positions based on their MMT status (White, 2011). The stigma and discrimination MMT patients face when seeking participation within mainstream recovery mutual aid groups are, in part, expressions of the larger professional and cultural stigma attached to MMT in the United States (Murphy & Irwin, 1992; Vigilant, 2004). Negative experiences within NA, AA, and other support groups prompted

creation of an alternative mutual aid framework, Methadone Anonymous (MA), specifically for current and former MMT patients. MA has grown since its inception in 1991, but it is not widely available in the U.S. at the present time (Gilman, Galanter, & Dermatis, 2001; Ginter, in press; Glickman, Galanter, Dermatis, & Dingle, 2006; McGonagle, 1994; White, 2009).

There is evidence that attitudes toward medications within recovery mutual aid groups may be shifting (Rychtarik, Connors, Dermen, & Stasiewics, 2000; Tonigan & Kelly, 2004), or at least being re-evaluated within local groups (White, 2011), and recent definitions of recovery are encompassing people in medication-assisted recovery who meet such definitional criteria as sobriety, improvement in global health, and citizenship (Betty Ford Consensus Panel, 2007).

In spite of continued discussions in professional circles about the challenges faced by MMT patients as they seek participation in NA, AA, and other addiction recovery mutual aid organizations, no in-depth survey has been published regarding the actual rate of participation of MMT patients in such groups. This article presents data on the rate of mutual aid participation of 322 MMT patients and their experiences within and perception of NA, AA, and other recovery support groups.

Methodology

Setting. The survey was conducted at Partners in Drug Abuse Rehabilitation and Counseling (PIDARC), which was founded in 1971 in response to a request from Washington DC's Narcotic Treatment Agency to create a private alternative to the city's then expanding network of methadone treatment programs. Today, PIDARC is a 501(c)3 not-for-profit, comprehensive OTP treating more than 650 patients with a staff of 24 counselors, nurses, physicians, and administrative support staff. The program is housed in a large medical office building on the edge of a major university with two dormitories and a small hotel immediately adjacent. The PIDARC treatment philosophy is based on the belief that opioid addiction is a chronic, life-threatening illness best treated with long-term medication maintenance and participation in a rich menu of clinical and recovery support services. PIDARC treatment focuses on helping patients in all relevant domains, i.e., mental and physical health, family relationships, housing, legal problems, employment, and recovery-enhancing leisure activities. Specialized groups are provided for women who have experienced abuse, patients struggling with co-occurring alcohol or cocaine dependence, and patients with co-occurring mental illness. A specialized harm reduction group is offered for patients with continued problems of opioid addiction.

The majority of PIDARC patients are poor, African American, and aging (85% over the age of 45), with prolonged past histories in the criminal justice system. Many present with a long series of past treatment failures and current medical problems, including Hepatitis C and/or HIV. Patients admitted to MMT are individually assigned to a phase one orientation group during induction and subsequently assigned to a primary counseling group that they are expected to attend at least twice a month. Medication take-home privileges are partially contingent upon such participation. There are no onsite NA, AA, or MA meetings held at the clinic and no formal 12-Step orientation lectures. Patients are verbally encouraged in the groups to attend local meetings, meeting lists are visibly posted at the clinic, and a non-clinical staff person who is a member of NA and who has daily contact with patients assertively promotes NA involvement. Participation in NA, AA, or other recovery mutual aid groups is not a requirement for treatment

participation, but may be part of an individual treatment plan, particularly when an individual is considering tapering from MMT.

Purpose. Discussions within PIDARC about how to further improve long-term recovery outcomes sparked a decision to conduct a pilot survey of patients to determine baseline levels of community-based recovery support activities, including participation in NA, AA, and other recovery mutual aid groups.

Survey Questionnaire. The survey instrument consisted of 53 questions, 29 of which focused specifically on recovery mutual aid group participation. Responses to questions could be provided by check marking appropriate boxes, inserting numbers, and choosing from forced choice and scaled answers. Following each of the key questions, space was provided for any volunteered comment related to the particular topic.

Survey Administration. The survey was introduced to all patients attending primary counseling groups during a randomly selected week (November 7-11, 2011). Counselors leading their respective home groups that week explained the purpose of the survey to the patients, assured patients that the survey was completely voluntary, provided assurances that choosing to participate or not participate would have no bearing on their treatment, and assured patients that their responses were completely confidential. No compensation or other incentives for survey completion were provided. Of 323 patients attending home groups on the target week, 322 agreed to participate in the survey—51% of the total 625 MMT patients enrolled in treatment the week the survey was conducted. Each group leader distributed the survey forms, read each survey question (to ensure inclusion of patients with reading difficulties), and provided time for group members to enter a response to each question. The surveys contained no personally identifying information, and upon completion were placed in an envelope, sealed, and delivered to a research consultant for analysis.

Data Analysis. SPSS for Windows version 15 was used for the analyses. Demographic variables and survey responses of subgroups of respondents were analyzed using chi-square statistics and analysis of variance for comparisons of proportions and means, respectively. All available data were included in the analyses, and the total number of respondents to each survey question was noted for each calculation. Missing data points were not replaced with averages or other estimates based on the characteristics of those for whom data were available.

Results

Survey Participant Profile. Slightly more than half of surveyed participants were male (55%); 45% were female. The ages of participants ranged from 21 years to 79 years, with a mean of 53 years. The number of months in continuous MMT ranged from 1 to 288 (24 years) with a mean of 33 months, or 2.75 years. The self-reported, estimated percentage of days in the past year abstinent from alcohol and non-prescribed drugs ranged from 0% to 100% with a mean of 69%.

Primary Affiliation. Two hundred fifty-nine (259) of 322 respondents (80.4%) identified a primary affiliation related to their recovery support. As seen in Table 1, the two primary affiliations were NA (67.6%) and Other Community Support (11.2%). Although many survey respondents reported participation in AA (exclusively or in tandem with NA), only 7.3% reported AA as their primary affiliation. Other community support most often involved church or the primary counseling group to which each patient is assigned at PIDARC.

Table 1: Primary Recovery Support Affiliation

Self-reported Primary Affiliation	(n =259)
NA	67.6%
AA	7.3%
Both NA and AA	7.7%
Other 12-Step	1.5%
Other Community Support	11.2%
AA Plus Other	0.4%
NA Plus Other	4.2%

Current NA/AA Participation. Patients who reported attending either NA or AA since admission to MMT treatment were considered current participants in these 12-step programs. Each of the 322 respondents was categorized into one of four groups based on current participation status: No Current NA/AA participation (34.2%), NA Only (31.7%), AA Only (5.0%), and Both NA and AA (29.2%). Statistical comparisons revealed no significant differences across the four groups on age, gender, or months in MMT.

Intensity of Participation. Intensity of participation was measured both by meeting attendance and by participation in particular aspects of 12-Step programs. Table 2 displays the average number of meetings attended over three spans of time by individuals currently active in NA and/or AA. For example, 151 survey respondents attended an average of 36.98 NA meetings after beginning MMT. These same individuals had attended 34.96 NA meetings on average in the past year and 228.24 such meetings during their lifetime. In addition to attending NA and/or AA meetings, 27 respondents had participated in other 12-Step groups since treatment admission, and 61 had participated in other community support groups. Frequency of participation in these other groups was lower on average than for NA or AA.

Table 2: Lifetime, Past Year, and Since Treatment Admission Participation in Support Groups

	Types of Meetings Attended			
Time Period of Meeting Attendance	NA (n = 151)	AA (n = 80)	Other 12-Step (n = 27)	Other Community Support

				(n = 61)
Lifetime	228.24	200.26	110.73	104.25
Past Year	34.96	34.70	14.95	20.30
Since Treatment Admission	36.98	34.24	19.56	28.16

Table 3 illustrates the level of participation in key ingredients of 12-Step programs by individuals currently active in NA and/or AA. Statistical comparisons revealed that those who participated only in NA were significantly less likely ($p < .05$) to participate in 7 of the 9 areas than were those who attended AA, either alone or in combination with NA. In regard to sponsoring others, a significantly greater proportion of those in both NA and AA (20.2%) engaged in this activity than did those participating in just NA or AA (7.8% and 6.3%, respectively).

Table 3: Levels of Participation in Various Aspects of 12-Step Programs

Area of Participation	Current Participation Group			Total (n = 212)	p Value*
	NA Only (n = 102)	AA Only (n = 16)	NA & AA (n = 94)		
Home Group	33.3%	50.0%	52.1%	49.9%	.025
Have a Sponsor	16.7%	37.5%	34.0%	25.9%	.012
Sponsoring Others	7.8%	6.3%	20.2%	13.2%	.027
Speak at Meetings	24.5%	56.3%	48.9%	37.7%	.001
Socialize Before/After Meetings	34.3%	37.5%	48.9%	41.0%	ns
Attend 12-Step Social Events	11.8%	31.3%	34.0%	23.1%	.001
Active Step Work	10.8%	31.3%	29.8%	20.8%	.003
Helping other Addicts	10.8%	31.3%	35.1%	23.1%	<.001
Involved in NA/AA Service Work	5.9%	25.0%	28.7%	17.5%	<.001

*Level of significance (2-sided) from Pearson chi-square statistic

Self-Perceived Effects of Participation. Over three-quarters of respondents (77.2%) currently participating in NA said that it was very or extremely helpful to them; 72.4% of current AA participants rated this activity as very or extremely helpful. Only about 3.5% of each group said that NA or AA was not helpful. When given a forced choice of whether AA or NA was more helpful to their recovery, 38.1% of 155 respondents reported that both were equally helpful, 48.4% reported that NA was more helpful, 12.3% reported that AA was more helpful, and 1.3% reported that neither were helpful.

Among patients who found AA and NA equally helpful, written comments reflected the fact that AA and NA share sobriety goals and provide effective support. Among individuals who said AA is more helpful, comments generally reflected the perception that AA provided more structure and had a stronger spiritual base than NA. Among individuals who said NA was more helpful, participants noted that they identified more easily with a drug-focused fellowship since many did not drink nor have a history of alcohol problems, and that they related more easily to people attending NA meetings. When asked what aspects of AA or NA involvement were most helpful, responses clustered on social aspects of participation—talking, listening, sharing, learning from others, meetings, and socialization outside of meetings.

Among the small number of individuals who reported NA (2) or AA (2) was hurtful to them, comments noted that the stories sometimes provided new drug contacts or increased cravings to use. One person reported being asked to leave an NA meeting and not come back after revealing his or her methadone treatment status.

AA/NA Response to MMT Patient Status. Almost a quarter (24.4%) of respondents (with current or past involvement in NA or AA) reported having had a serious problem within NA or AA related to their status as a methadone patient. Table 4 identifies the frequency with which respondents faced particular challenges.

Table 4: NA and AA Responses to MMT Patient Status

Response to MM Patient Status	NA (n=228)	AA (n=142)
Received negative comments about methadone use	43.0%	45.1%
Were pressured to reduce the dose of methadone	21.9%	23.2%
Were pressured to stop taking methadone	32.9%	34.5%
Were denied the right to speak at a meeting because of being in methadone treatment	14.5%	14.1%
Were denied the right to become a sponsor because of being in methadone treatment	8.8%	9.9%

Were denied the right to chair a meeting or do other service work because of being in methadone treatment	8.3%	9.9%
Experienced other forms of stigma or discrimination related to methadone treatment	19.7%	19.7%

Patterns of Disclosure of MMT Patient Status. When queried about how they managed disclosure of their MMT patient status in the context of NA and AA, 168 respondents with current or past NA or AA involvement reported three major patterns: sharing MMT patient status with a sponsor but not the group (25.6%), sharing MMT patient status with a sponsor and the group (33.9%), or refraining from sharing MMT patient status with either their sponsor or the group (40.5%). Patients self-reported that they were more likely to discuss their involvement in MMT with family members or friends than in NA/AA settings.

Patient Recommendations on AA/NA Linkage. Seventy-eight percent of all patients surveyed believed that new and current MMT patients should be linked to NA and/or AA, but when specifically asked whether this should include all patients or only those who request such linkage, 35.4% recommended all patients, and 64.6% recommended only those who requested it. Patients were also split on whether linkage to NA/AA should be made at admission (51.3%) or after 3 months in treatment (48.7%).

Limitations

There are several limitations to this study. First, MMT programs vary considerably in philosophy, clinical practices, and levels of encouragement for patient participation in community-based recovery mutual aid groups (White & Torres, 2010), and there is considerable variation from community to community regarding the attitudes of NA and AA groups towards medication-assisted treatment of addiction in general and methadone maintenance treatment for opioid addiction in particular (White, 2011). Lacking comparative surveys, it is unclear the extent to which these findings are applicable across the United States or in other countries.

Second, although efforts were made to achieve a sizeable random sample of clinic participants, it is unclear how those patients not surveyed may have differed from those who participated in the survey. Seventy-five (75) patients with 13 and 27 days of take-home medication were not scheduled to be at the clinic for groups the week the survey was conducted. It is unclear how their omission may have influenced the outcomes.

Third, the lack of normative data on mutual aid participation rates across addiction treatment modalities limits any determination on how the rates in this survey compare with other OTPs and programs that do not offer medication-assisted treatment.

In spite of these limitations, the present study is one of the first systematic efforts to measure the rate and intensity of 12-Step group participation by MMT patients at an OTP in the United States. Further research is needed on the utilization of NA, AA, and other recovery support groups by patients in medication-assisted treatment and the effects of such participation on short- and long-term recovery outcomes.

Discussion

The special obstacles MMT patients face in participating in mainstream addiction recovery mutual aid groups have been noted in the professional literature (White, 2011; Zweben, 1987), but the actual level of such participation has not been formally investigated. The present study surveyed 322 MMT patients in a private, non-profit addiction treatment program in an urban Northeastern United States community. The questions focused on the level of patient participation in and perceptions of NA and AA. The survey found a high rate of past year NA/AA participation (66%) and high rates of reported helpfulness of AA and NA (88-89%). The participation and helpfulness ratings are higher than might be expected given the negative attitudes toward methadone that MMT patients may encounter in their interactions within 12-Step groups (White, 2011). Staff members at the survey site attributed this high rate of NA/AA exposure to one staff member who was an NA member and who strongly encouraged NA involvement through his daily interactions with patients. Although AA/NA co-attendance was common among this sample (29%), a clear majority (68%) of those participating in mutual aid groups claimed NA as their primary affiliation, in spite of NA's stance on medication-assisted treatment of opioid addiction (Narcotics Anonymous World Services, Inc., 1996).

Research in the past decade on 12-Step groups has isolated a number of "active ingredients" beyond meeting attendance that influence long-term recovery outcomes (Kaskutas, Bond, & Humphreys, 2002; Kelly, Hoepfner, Stout, & Pagano, 2011; Moos, 2008; Morgenstern, Labouvie, McCray, Kahler, & Frey, 1997; Zembore, 2007; Zembore, Kaskutas, & Ammon, 2004). The survey sought to identify the level of participation in such ingredients and found, compared to meeting attendance, much lower rates of having a home group (50%), having a sponsor (26%), sponsoring others (13%), attending 12-Step social events (23%), and active step work (21%). One possible interpretation of these survey findings is that patients at this clinic have high NA/AA exposure rates in spite of encountering some negative attitudes toward methadone, but fail to be fully integrated into NA/AA cultures because of such attitudes. One-quarter (25%) of NA/AA-involved patients in this survey reported a negative experience related to their MM patient status, which likely also influenced the low level of self-disclosure (34%) of that status to sponsors and at meetings. The lack of studies on normative attitudes in NA and AA on the pharmacotherapeutic treatment of opioid addiction prevents comparison of our findings in one clinic and one city with NA and AA in other communities. The field could benefit from studies of existing AA/NA norms as well as studies on how participation or denial of participation in key 12-Step ingredients affects recovery outcomes for patients in MMT and other medication-assisted treatment.

This pilot study suggests that methadone patients may be participating in 12-Step fellowships at a much higher rate than might be expected. While a sizable minority reported problems with NA and AA, the overall majority of these MMT patients were not deterred by these problems and believed that they benefited from concurrent participation in MMT and 12-Step groups.

There is a growing body of literature on the value of addiction treatment programs assertively linking patients to AA (Sisson & Mallams, 1981; Timko, DeBenedetti, & Billow, 2006; White & Kurtz, 2006) as well as manualized procedures for facilitating such linkage for adolescents and adults (Passetti & Godley, 2008; Kaskutas, Subbaraman, Witbrodt, & Zembore, 2009). These procedures have not been fully adapted to NA, particularly for the special circumstances of MMT patients. Such linkages and the quality of NA participation for MMT

patients could be enhanced by exploring such options as developing formal relationships with NA service committees, hosting NA orientation and “starter meetings” onsite at OTP facilities, actively coaching OTP patients about how to handle their patient status in the context of NA/AA, implementing assertive linkage protocols to local NA and other recovery mutual aid meetings, and co-hosting educational programs on medication-assisted treatment and recovery with local recovery community organizations. OTPs could also play a potentially active role in encouraging the development of local Methadone Anonymous meetings and other recovery support meetings for patients in medication-assisted recovery. Future studies should further evaluate patterns of participation in recovery mutual aid groups by patients in medication-assisted treatment and the effects of such participation on multiple dimensions of recovery.

Methadone maintenance is a substance-specific treatment, but addiction is not a substance-specific disorder. Treatment programs, including OTPs, must address complex patterns of concurrent and sequential drug use presented by their patients (Backmund et al., 2005; Dobler-Mikola et al., 2005). Increasing patient participation in recovery mutual aid groups may prove helpful in addressing patterns of multiple drug dependencies. Although the common conceptualization of methadone use is “for life,” the reality is that few patients who enter OTPs stay for their lifetimes. Clinical experience has shown us that many, if not most, patients who leave OTPs leave on current doses of methadone without planned tapering and support for the transition to recovery maintenance without medication support. The risk of relapse is great under these circumstances and remains a lifelong risk; 12-Step fellowships and other recovery mutual aid groups may provide a source of critical support for patients seeking stable long-term recovery during and following discharge from OTPs.

References

- Backmund, M., Meyer, K., Henkel, C., Soyka, M., Reimer, J., & Schutz, C. G. (2005). Co-consumption of benzodiazepines in heroin users, methadone-substituted and codeine-substituted patients. *Journal of Addictive Diseases, 24*(4), 17-29. doi:10.1300/J069v24n04_02
- Betty Ford Institute Consensus Panel. (2007). What is recovery? A working definition from the Betty Ford Institute. *Journal of Substance Abuse Treatment, 33*, 221-228. doi:10.1016/j.jsat.2007.06.001
- Calsyn, D. A., Malcy, J. A., & Saxon, A. J. (2006). Slow tapering from methadone maintenance in a program encouraging indefinite maintenance. *Journal of Substance Abuse Treatment, 30*, 159-163. doi:10.1016/j.jsat.2005.11.007
- Clausen, T., Ancherson, K., & Waal, H. (2008). Mortality prior to, during and after opioid maintenance treatment (OMT): A national prospective cross-registry study. *Drug and Alcohol Dependence, 94*(1-3), 151-157. doi:10.1016/j.drugalcdep.2007.11.003
- Deck, D., & Carlson, M. J. (2005). Retention in publicly funded methadone maintenance treatment in two Western states. *Journal of Behavioral Health Services & Research, 32*(1), 43-60. doi:10.1007/BF02287327
- Dobler-Mikola, A., Hattenschwiler, J., Melli, D., Beck, T., Boni, E., & Modestin, J. (2005). Patterns of heroin, cocaine, and alcohol abuse during long-term methadone maintenance treatment. *Journal of Substance Abuse Treatment, 29*(4), 259-265. doi:10.1016/j.jsat.2005.08.002
- Dole, V. P. (1994). What have we learned from three decades of methadone maintenance treatment? *Drug and Alcohol Review, 13*, 3-4. doi:10.1080/09595239400185661
- Dole, V. P., & Nyswander, M. E. (1967). Heroin addiction—a metabolic disease. *Archives of Internal Medicine, 120*, 19-24.
- Dole, V. P., Nyswander, M. E., & Kreek, M. J. (1966). Narcotic blockade. *Archives of Internal Medicine, 118*, 304-309
- Gilman, S. M., Galanter, M., & Dermatis, H. (2001). Methadone Anonymous: A 12-step program for methadone maintained heroin addicts. *Substance Abuse, 22*(4), 247-256. doi:10.1023/A:1012200712300
- Ginter, W. (in press). Methadone Anonymous and mutual support for medication-assisted recovery. *Journal of Groups in Addiction and Recovery.*
- Glickman, L., Galanter, M., Dermatis, H., & Dingle, S. (2006). Recovery and spiritual transformation among peer leaders of a modified methadone anonymous group. *Journal of Psychoactive Drugs, 38*(4), 531-533. doi:10.1080/02791072.2006.10400592
- Gossop, M., Green, L., Phillips, G., & Bradley, B. (1989). Lapse, relapse and survival among opiate addicts after treatment: A prospective follow-up study. *British Journal of Psychiatry, 154*, 348-353. doi:10.1192/bjp.154.3.348
- Gossop, M., Stewart, D., & Marsden, J. (2008). Attendance at Narcotics Anonymous and Alcoholics Anonymous meetings, frequency of attendance and substance use outcomes after residential treatment for drug dependence: A 5-year follow-up study. *Addiction, 103*(1), 119-125. doi:10.1111/j.1360-0443.2007.02050.x
- Joseph, H., Stancliff, S., & Langrod, J. (2000). Methadone maintenance treatment (MMT): A review of historical and clinical issues. *Mount Sinai Journal of Medicine, 67*, 347-364.

- Kaskutas, L. A. (2009). Alcoholism Anonymous effectiveness: Faith meets science. *Journal of Addictive Diseases*, 28, 147-157. doi:10.1080/10550880902772464
- Kaskutas, L. A., Bond, J., & Humphreys, K. (2002). Social networks as mediators of the effects of Alcoholics Anonymous. *Addiction*, 97(7), 891-900. doi:10.1046/j.1360-0443.2002.00118.x
- Kaskutas, L. A., Subbaraman, M., Witbrodt, J., & Zemore, S. (2009). Effectiveness of Making Alcoholics Anonymous Easier (MAAEZ), a group format 12-step facilitation approach. *Journal of Substance Abuse Treatment*, 37(3), 228-239. doi:10.1016/j.jsat.2009.01.004
- Kelly, J. F., Hoepfner, B., Stout, R. L., & Pagano, M. (2011). Determining the relative importance of the mechanisms of behavior change within Alcoholics Anonymous: A multiple mediator analysis. *Addiction*, 107, 289-299. doi:10.1111/j.1360-0443.2011.03593.x
- Kelly J. F., & Yeterian, J. (2008). Mutual-help groups. In W. O'Donohue & J. R. Cunningham (Eds.), *Evidence-based adjunctive treatments* (pp. 61-106). New York: Elsevier.
- Kleber, H. (2008). Methadone maintenance 4 decades later: Thousands of lives saved but still controversial. *Journal of the American Medical Association*, 300(9), 2303-2305. doi:10.1001/jama.2008.648
- Kreek, M. J., & Vocci, F. (2002). History and current status of opioid maintenance treatments: Blending conference session. *Journal of Substance Abuse Treatment*, 23(2), 93-105. doi:10.1016/S0740-5472(02)00259-3
- Langrod, J., Des Jarlais, D. C., Alksne, L., & Lowinson, J. (1983). Locus of control and initiation of detoxification among male methadone maintenance patients. *International Journal of the Addictions*, 18(6), 783-790.
- Laudet, A. B., & White, W. L. (2005). An exploratory investigation of the association between clinicians' attitudes toward twelve-step groups and referral rates. *Alcoholism Treatment Quarterly*, 23(1), 31-45. doi:10.1300/J020v23n01_04
- Magura, S., & Rosenblum, A. (2001). Leaving methadone treatment: Lessons learned, lessons forgotten, lessons ignored. *Mount Sinai Journal of Medicine*, 68, 62-74.
- McGonagle, D. (1994). Methadone Anonymous: A 12-step program. Reducing the stigma of methadone use. *Journal of Psychosocial Nursing*, 32(10), 5-12.
- McLellan, A. T., Arndt, I. O., Metzger, D. S., Woody, G. E., & O'Brien, C. P. (1993). The effects of psychosocial services in substance abuse treatment. *Journal of the American Medical Association*, 269, 1953-1959. doi:10.1001/jama.1993.03500150065028
- Moos, R. H. (2008). Active ingredients of substance use-focused self-help groups. *Addiction*, 103, 387-396. doi:10.1111/j.1360-0443.2007.02111.x
- Morgenstern, J., Labouvie, E., McCray, B. S., Kahler, C. W., & Frey, R. M. (1997). Affiliation with Alcoholics Anonymous after treatment: A study of its therapeutic effects and mechanisms of action. *Journal of Consulting and Clinical Psychology*, 65(5), 768-777. doi:10.1037/0022-006X.65.5.768
- Murphy, S., & Irwin, J. (1992). "Living with the dirty secret": Problems of disclosure for methadone maintenance clients. *Journal of Psychoactive Drugs*, 24(3), 257-264. doi:10.1080/02791072.1992.10471646
- Narcotics Anonymous World Services, Inc. (1996). *World Service Board of Trustees Bulletin #29: Regarding methadone and other drug replacement programs*. Retrieved December 22, 2010 from <http://www.na.org/?ID=bulletins-bull29>

- National Consensus Development Panel on Effective Medical Treatment of Opiate Addiction. (1998). Effective medical treatment of opiate addiction. *Journal of the American Medical Association*, 280(22), 1936-1943. doi:10.1001/jama.280.22.1936
- National Institute on Drug Abuse. (1999). *Principles of addiction medicine: A research-based guide* (NIH Publication No. 99-1180). Rockville, MD: National Institute on Drug Abuse.
- Nosyk, B., Sun, H., Evans, E., Marsh, D. C., Anglin, M. D., Hser, Y-I., & Anis, A. H. (in press). Defining dosing patterns characteristics of successful tapers following methadone maintenance treatment: Results from a population-based retrospective study. *Addiction*. doi:10.1111/j.1360-0443.2012.03870.x
- Obuchowsky, M., & Zweben, J. E. (1987). Bridging the gap: The methadone client in 12-Step programs. *Journal of Psychoactive Drugs*, 19(3), 301-302. doi:10.1080/02791072.1987.10472416
- Parrino, M. (2008). Coordinating methadone treatment providers and policymakers: Lessons learned over 30 years. *Heroin Addiction and Related Clinical Problems*, 11(1), 43-46.
- Passetti, L. L., & Godley, S. H. (2008). Adolescent substance abuse treatment clinicians' self-help meeting referral practices and adolescent attendance rates. *Journal of Psychoactive Drugs*, 40, 29-40. doi:10.1080/02791072.2008.10399759
- Ronel, N., Gueta, K., Abramsohn, Y., Caspi, N., & Adelson, M. (2011). Can a 12-step program work in methadone maintenance treatment? *International Journal of Offender Therapy and Comparative Criminology*, 55(7), 1135-1153. doi:10.1177/0306624X10382570
- Rychtarik, R. G., Connors, G. J., Dermen, K. H., & Stasiewics, P. R. (2000). Alcoholics Anonymous and the use of medications to prevent relapse: An anonymous survey of member attitudes. *Journal of Studies on Alcohol*, 61, 134-138.
- Sisson, R. W., & Mallams, J. H. (1981). The use of systematic encouragement and community access procedures to increase attendance at Alcoholics Anonymous and Al-Anon meetings. *American Journal of Drug and Alcohol Abuse*, 8, 371-376
- Stancliff, S., Myers, J. E., Steiner, S., & Drucker, E. (2002). Beliefs about methadone in an inner city methadone clinic. *Journal of Urban Health*, 79, 571-578
- Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2008). *Treatment Episode Data Set (TEDS): 2005. Discharges from substance abuse treatment services* (DASIS Series: S-41, DHHS Publication No. (SMA) 08-4314). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.
- Timko, C., DeBenedetti, A., & Billow, R. (2006). Intensive referral to 12-Step self-help groups and 6-month substance use disorder outcomes. *Addiction* 101, 678-688. doi:10.1111/j.1360-0443.2006.01391.x
- Tonigan, J. S., & Kelly, J. F. (2004). Beliefs about AA and the use of medications: A comparison of three groups of AA-exposed alcohol dependent persons. *Alcoholism Treatment Quarterly*, 22(2), 67-78. doi:10.1300/J020v22n02_06
- Vigilant, L. G. (2004). The stigma paradox in methadone maintenance: Naïve and positive consequences of a "treatment punishment" approach to opiate addiction. *Humanity and Society*, 28(4), 403-418. doi:10.1177/016059760402800404
- White, W., & Kurtz, E. (2006). *Linking addiction treatment and communities of recovery: A primer for addiction counselors and recovery coaches*. Pittsburgh, PA: IRETA/NeATTC.

- White, W. L. (2009). *Peer-based addiction recovery support: History, theory, practice, and scientific evaluation*. Chicago, IL: Great Lakes Addiction Technology Transfer Center and Philadelphia Department of Behavioral Health and Mental Retardation Services.
- White, W. L. (2011). *Narcotics Anonymous and the pharmacotherapeutic treatment of opioid addiction*. Chicago, IL: Great Lakes Addiction Technology Transfer Center and Philadelphia Department of Behavioral Health and Intellectual disability Services.
- White, W. L., & Torres, L. (2010). *Recovery-oriented methadone maintenance*. Chicago, IL: Great Lakes Addiction Technology Transfer Center, Philadelphia Department of Behavioral Health and Mental Retardation Services, and Northeast Addiction Technology Transfer Center.
- Zemore, S. E. (2007). Helping as healing among recovering alcoholics. *Southern Medical Journal*, 100(4), 447-450. doi:10.1097/SMJ.0b013e31803175da
- Zemore, S. E., Kaskutas, L. E., & Ammon, L. N. (2004). In 12-Step groups, helping helps the helper. *Addiction*, 99, 1015-1023. doi:10.1111/j.1360-0443.2004.00782.x
- Zweben, J. E. (1987). Can the patient on medication be send to 12-step programs? *Journal of Psychoactive Drugs*, 19(3), 299-300. doi:10.1080/02791072.1987.10472415