Scientific Studies of Narcotics Anonymous:

Study Abstracts

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A recently posted paper summarized scientific research to date published on Narcotics Anonymous (White, Galanter, Kelly and Humphreys, 2020). Presented below is a compendium of the studies reviewed in that paper. As a reminder, published literature on NA was identified through the authors' research files, electronic bibliographic search engines (PubMed, Medline, PsychInfo, Cochrane Library, Campbell Collaboration Library, Google Scholar, Researchgate, and WorldWideScience), and an unpublished NA Research Bibliography.[2] The authors excluded from this review published papers describing NA's history and program (other than to show when NA's presence was first acknowledged in the scientific literature), theoretical papers related to NA's program of recovery, NA- and 12-Step-related commentaries, and books and book chapters on NA. Also excluded were articles on NA that appeared in addiction professional trade journals, recovery magazines, or in the popular press or social media. Our primary focus was to review studies of NA published in the scientific literature.

The results of these searches revealed three bodies of literature: 10 early (1951-1989) references/descriptions of NA as a recovery support resource, 74 published studies specifically on NA, and 158 studies on "12-Step programs" that included NA but did not separate study findings on NA from Alcoholics Anonymous, Cocaine Anonymous, or other 12-Step programs. Brief abstracts of these studies are presented below, quoting the main findings and conclusions as stated by the study authors. The abstracts are displayed chronologically in three sets, early references to NA's existence and program of recovery, NA-specific studies, and 12-Step studies that included NA members in the study samples.

The analysis of these studies is presented in: White, W., Galanter, M., Humphreys, K., & Kelly, J. (2020) "We do recover": Scientific studies on Narcotics Anonymous. (Posted at www.williamwhitepapers.com)

Earliest Brief References to NA is the Scientific/Medical Literature

1. Anonymous. (1951). Narcotics Anonymous. *American Journal of Public Health*, 41, p. 254. **First public Announcement of NA in a Professional Journal. "The New York City chapter of Narcotics Anonymous has put out a leaflet, Our Way of Life: An Introduction to N.A." P. 254**

[1] Chestnut Health Systems

[2] White, W., Budnick, C & Pickard, B. (2011) Narcotics Anonymous: A chronology of the scientific and professional literature. Accessed January 28, 2020 at http://www.williamwhitepapers.com/pr/2015%20Professional%20Scientific%20Literature%20on%20NA.pdf

2. Fraser, H. F., & Grider, J. A. (1953). Treatment of drug addiction. *American Journal of Medicine*, May, 571-577. **Brief Reference to Addicts Anonymous (Precursor to NA) as a recovery support resource.**

3. Winick, C. (1957). Narcotics addiction and its treatment. *Law and Contemporary Problems*, 22(1), 9-33. **"A related method of therapy is the kind of mutually-supportive group therapy offered by Narcotics Anonymous (NA), developed at Lexington in 1947 and started in I949 by Daniel Carlsen, an ex-addict who spent a good part of his life in an almost single-handed attempt to help addicts to help themselves. Its approach is similar to that of AA (Alcoholics Anonymous), and it has branches in many cities."** (P. 27)

4. Rasor, B. (1965). The institutional treatment of the narcotic addict. *Journal of the Mississippi State Medical Association*, 6, 11-14 (**Brief reference to Addicts Anonymous**).

5. Hawkins, D. J. (1980). Some suggestions for "self-help" approaches with street drug abusers. *Journal of Psychedelic Drugs*, 12(2), 131-137. **Brief discussion of potential of recovery mutual aid for people addicted to illicit drugs with only a single passing reference to NA.**

6. Anonymous (1985). Narcotics Anonymous. *Journal of the American Medical Association*, 254(21), 3037. **Letter to the Editor from a physician who recovered from addiction via NA involvement. "I recommend that physicians not rule out NA as a support group for recovery from drug addiction. It has been my path to a revolutionary improvement in my emotions, practice, and life."** P. 3037

7. Peyrot, M. (1985). Narcotics Anonymous: Its history, structure, and approach. *International Journal of the Addictions*, 20(10), 1509-1522. **First detailed history, structure, and program of NA published in a professional journal.**

8. Wells, B. (1987). Narcotics Anonymous (NA): The phenomenal growth of an important resource. *British Journal of Addiction*, 82(6), 581-582. Brief report noting the growth of NA internationally and in Britain. **Conclusion: "If the predictions of the World Service Office continue to be accurate, there seems little doubt that Narcotics Anonymous will fulfill its promise and provide the open-minded therapist and drug abuser alike with a community-based resource of enormous value."** (P. 582)

9. Nichols, H. (1988). Narcotics Anonymous. *Journal of Substance Abuse Treatment*, 5(3), 195-196. Essay reviewing status and potential value of NA. **Summary point: "For addicts leaving treatment, it can be hard to deal with a social environment where their decision to abstain from drugs may not be understood or supported. N.A. can provide an alternative to this difficult situation and can help people stay on track."** (P. 196)

10. Gifford, P. D. (1988-1989). A.A. and N.A. for adolescents. *Journal of Chemical Dependency Treatment*, 2(1), 265-284. **Essay on potential value of AA and NA for adolescents experiencing alcohol and other drug problems. Key summary point: "Chemically dependent adolescents do seem to want stability and they seem to be able to find it in N.A."** (P. 281)

Published English-language Studies of Narcotics Anonymous (1981-2020)

1. Nurco, D. (1981). The self-help movement and narcotics addicts. *American Journal of Drug and Alcohol Abuse*, 8(2), 139-151. Interviews with six leaders of NA in the Northeastern U.S. about the status of NA within their communities. **Conclusion: "The preliminary findings indicate that, in the geographical regions studies, NA has done effective work in moving addicts into peer groups and teaching them the importance of self-help as a way of abstinence from drugs." (p. 150).**

2. Christo, G. (1994). Does recovery happen in NA?: and how long does it take? *Druglink* (IsDD journal), 9(4), 17. Study of anxiety and self-esteem measures of 50 male and 50 female NA members compared to anxiety and self-esteem of 30 male and 30 female students. **Main Findings: "As 'cleantime' accumulated, self-esteem, anxiety and employment levels gradually improved, supporting the theory that NA addresses the core problem of low self-esteem. But not until the fourth year of recovery did scores approach those of the control group…Those in their fourth and fifth year of recovery were improving fastest." (P. 17)**

3. Christo, G., & Sutton, S. (1994). Anxiety and self-esteem as a function of abstinence time among recovering addicts attending Narcotics Anonymous. *British Journal of Clinical Psychology*, 33(2), 198-200. **Major Finding: "Among 200 members of Narcotics Anonymous (NA), those who had been off drugs and in contact with NA for longer tended to have lower trait anxiety and higher self-esteem scores, the relationship in each case being approximately linear." (P. 198)**

4. Christo, G., & Franey, C. (1995). Drug users' spiritual beliefs, locus of control and the disease concept in relation to Narcotics Anonymous attendance and six-month outcomes. *Drug and Alcohol Dependence*, *38*(1), 51-56. Follow-up of 101 patients admitted to drug treatment in the UK to see if spiritual orientation of NA dissuading NA attendance. **Major finding: "…spiritual beliefs were not found to cause external attributions for previous drug use or possible future relapse events. It emerged that the most powerful predictors of non-attendance were positive attitudes to the use of alcohol."** (P. 51)

5. Ronel, N. (1997). The universality of a self-help program of American origin: Narcotics Anonymous in Israel. *Social Work Health Care*, 25(3), 87-101.

Participant observation of more than 300 NA meetings in Israel between 1991-1993. **Conclusion: "In contrast to the initial hypothesis of this study, no difficulties were identified in transferring Narcotics Anonymous from its American sources to Israel."** (P. 98)

6. Christo, G. (1998). Narcotics Anonymous as aftercare: The statistics. *Addiction Counseling World*, 9(51), 22-26. Six-month follow-up study on 101patients admitted to abstinence-based treatments. **Main Findings: "NA attendance was indeed found to be related to less drug use among those who had left residential care. But we found that spiritual beliefs were not prerequisites for attendance of NA. Neither did it matter if recoverers construed their drug using as a disease/sickness, or a bad habit/ learned behaviour."** (p. 23.) Expanded analysis in 1999 monograph. **Main Findings: "Recovery of psychological health can take about five years after cessation of addictive drug use. NA self-help groups offer free post-treatment psychological support and NA attendance is associated with less drug use after leaving a protective treatment setting."**

7. Ronel, N. (1998). Narcotics Anonymous: Understanding the "Bridge of Recovery." *Journal of Offender Rehabilitation*, 27(1-2), 179-197. Participant-observation of more than 300 NA meetings in Israel. **Conclusion: "As a subculture of recovery, NA is uniquely positioned-equidistant between the prevailing culture and the drug sub-culture. On the one hand, it is a bridge connecting members of the drug subculture to the prevailing one. On the other hand, it also protects recovering addicts from certain influences of society as a whole."** (p. 194)

8. *Christo, G. (1999). Narcotics Anonymous as aftercare. Executive Summary No. 62. London: The Centre for Research on Drugs and Health Behaviour.* Follow-up study of 101 patients admitted to drug treatment in the UK. **Conclusions: "NA attendance was related to less drug use among those who had left residential care. Spiritual beliefs were not found to be prerequisites for attendance of NA."**

9. Rafalovich, A. (1999). Keep coming back—Narcotics Anonymous narrative and recovering-addict identity. *Contemporary Drug Problems*, 26(1), 131-157. A qualitative study of recovery identity in NA based on research observation of more than 150 NA meetings. **Conclusion: "Recovering addicts, without actually returning to drug use, have a wide variability in affinity with the recovering addiction identity…..There is, in short, a constant process of maintenance of the addict identity—an identity with moments of sincerity as well as cynicism."** (P. 152)

10. Ronel, N., & Humphreys, K. (2000). Worldview transformations of Narcotics Anonymous members in Israel. *International Journal of Self-Help and Self-Care*, 1(1), 101-127. Participant-observation at over 300 NA meetings in Israel

from 1991-1993. **Main Findings: "NA members in Israel undergo the process of "world view transformation" in four domains: Experience of self, universal order/God, relationships with others, and problem of addiction. NA members in Israel experienced changes in philosophy and values which were similar to those documented in studies of addiction-related 12-Step self-help groups in the U.S."** (P. 101)

11. Crape, B. L., Latkin, C. A., Laris, A. S., & Knowlton, A. R. (2002). The effects of sponsorship in 12-step treatment of injection drug users. *Drug and Alcohol Dependence*, 65(3), 291-301. A 1-year longitudinal study of 500 former and current injection drug users in Baltimore. **Major finding: "…providing direction and support to other addicts is associated with improved success in sustained abstinence for the sponsors but does little to improve the short-term success of the persons being sponsored."** (p. 291)

12. Crossen-White, H. & Galvin, K. (2002). A follow-up study of drug misusers who received an intervention from a local arrest referral scheme. *Health Policy*, 61, 153–171. Follow-up study of 21 drug offenders referred to various recovery support resources: **Key Finding: "Narcotics anonymous fellowships were identified as very central to the recovery process for interviewees. Only one interviewee had not made contact with NA. Those who had remained clean throughout the period since their interview in 1998 had used NA extensively and consistently. Those who relapsed demonstrated a less frequent pattern of usage or had given up attending entirely."** (P. 164)

13. Toumbourou, J. W., Hamilton, M., U'Ren, A., Stevens-Jones, P., & Storey, G. (2002). Narcotics Anonymous participation and changes in substance use and social support. *Journal of Substance Abuse Treatment*, *23*(1), 61-66. Interviews were conducted with 91 new NA members in Victoria, Australia and 62 were re-interviewed a year later to ascertain effects of meeting attendance, step work, and service work on clinical outcomes. **Conclusion: "The findings demonstrated an association between self-help participation and both reductions in substance use problems and also improvement in social support." (p. 66)**

14. Rascon, C., & Tonigan, J. S., (2003). A comparison of Narcotics Anonymous and Alcoholics Anonymous member perceptions of group dynamics. *Alcoholism: Clinical and Experimental Research*, 26(5, Supplement), 648 (Abstract). ***Conclusion: "Findings indicate that the two sister 12-Step programs were more similar than different in member perceptions of their respective social group dynamics."***

15. Saleh Moghadam, A., Bazaz Kahani, H. & Vaghei, S. (2003). A comparison of life quality of detoxified addicts in Narcotics Anonymous, therapeutic community and methadone maintenance treatment referred to rehabilitation clinics in Mashad city. *The Journal of Research Development In Nursing and Obstetrics,*

Special Issue Of Sixth Seminar Of Nurse, Obstetrician and Research, 28-35. **UNABLE TO ACQUIRE IN ENGLISH**

16. Toumbourou, J. W., & Hamilton, M. (2003). *The early impact of involvement in Narcotics Anonymous self-help groups. A report from the Role of Self-Help Groups in Drug Treatment Research Projec*t. Turning Point Alcohol and Drug Centre. (Toumbourou, J. W., Hamilton, M., U'Ren, A., Stevens-Jones, P., & Storey, G. (2002). Narcotics Anonymous participation and changes in substance use and social support. *Journal of Substance Abuse Treatment*, 23(1), 61-66.) Study of 91 NA members in Australia re-contacted at 3-month intervals. Key Findings: 1) **"58% had maintained at least weekly self-help attendance for 12 months after the first interview"** and 2) **"this level of self-help attendance demonstrated a number of advantages including a four-fold reduction in alcohol and drug use and improvements in social support."** (p. x)

17. Sotoodeh Asl, N., Behnam, B., Ghorbani, R. (2004). The effect of narcotics anonymous on the personal attributes of patients dependent on narcotics. *Koomesh*, 14(30), 316320. **UNABLE TO ACQUIRE IN ENGLISH**

18. Green, L. L., Fullilove, M. T., & Fullilove, R. E. (2005). Remembering the lizard: Reconstructing sexuality in the rooms of Narcotics Anonymous. *Journal of Sex Research*, 42(1), 28-34. Researchers observed 95 NA meetings in the South Bronx. **Conclusion: "We find that the rooms assume enormous importance in structuring the lives of people in recovery…people can recover from addiction in neighborhoods like the South Bronx, where drug use is ubiquitous and the use culture permeates every aspect of daily life."** (P. 34)

19. Chen, G. (2006). Social support, spiritual program, and addiction recovery. *International Journal of Offender Therapy and Comparative Crimino*logy, 50(3), 306-323. Follow-up of 93 inmates with a drug use disorder assigned to either NA meetings and a 12-Step treatment track or exposure to NA meetings without the 12-Step treatment track. **Main Finding: "Inmates participating in the 12-step program demonstrated a higher sense of coherence and meaning in life and a gradual reduction in the intensity of negative emotions (anxiety, depression, and hostility) than those participating in NA meetings without the 12-step program."**

20. Flynn, A. M., Alvarez, J., Jason, L. A., Olson, B. D., Ferrari, J. R., & Davis, M. I. (2006). African American Oxford House residents: Sources of abstinent social networks. *Journal of Prevention & Intervention in the Community*, 31(1-2), 111-119. **Key Findings: African American residents of Oxford House (OH) used Narcotics Anonymous (NA) at high rates, and that both OH and NA strongly contributed to abstinent social networks. …These findings suggest that OH and NA may be effective sources of abstinent social**

support for African Americans recovering from substance abuse. However, family members are well represented in the support networks of African Americans in OH." (P. 111)

21. Tuten, M., Jones, H. E., Lertch, E. W., & Stitzer, M. L. (2007). Aftercare plans of inpatients undergoing detoxification. *The American Journal of Drug and Alcohol Abuse*, 33, 547–555. Study of the aftercare preferences of 102 patients undergoing drug detoxification on the Bayview Medical Center campus of the Johns Hopkins Medical Institutions, in Baltimore, Maryland. **Main NA-related finding: "NA participation was the third most frequently endorsed aftercare service** [behind individual counseling and obtaining employment]**. NA meetings are generally widely available in communities, especially within large urban locales."** (P. 552)

22. Aliverdinia, A. (2009). Effectiveness of Narcotics Anonymous treatment on attitude towards addiction among participants in NA treatment *Journal of Social Studies*, 3(3), 145-147. **UNABLE TO ACQUIRE IN ENGLISH**

23. Bavi, S., Borna, M. (2010). The effect of psychological services in rehabilitation period on the negative self-concept, anxiety, depression and self-esteem of the self-referred addicts of Narcotics Anonymous of Ahvaz city. *Science and Research In Applied Psychology*, 39, 54-66. **UNABLE TO ACQUIRE IN ENGLISH**

24. Flora, K., Raftopoulos, A., & Pontikes, T. K. (2010). Current status of Narcotics Anonymous and Alcoholics Anonymous in Greece: Factors influencing member enrollment. *Journal of Groups in Addiction & Recovery*, 5(3-4), 226-239. **NA Findings based in questionnaires from 96 NA members included the following: "93.3% of those who completed the questionnaire reported sobriety for an average of 38.3 months. 50% of the study sample experienced relapses, and 40% of those reported a single relapse. 76.7% reported having had a sponsor for 32.2 months, and the majority had one (31.7%) or two (40%) sponsors while participating in a group. 35% responded that they served as sponsors themselves of a group member for an average of 43.3 months. The majority (47.6%) had one mentee; some had two (19%); while 33% had three to seven."** (P. 226)

25. Seraji, A., Momeni, H., & Salehi, A. (2010). The investigation of factors affecting dependence on narcotics and reappearance of drug usage in narcotics anonymous. *Arak Medical University Journal* (AMUJ), 13(3), 68-75. [Persian] Study of factors that influence the recurrence of drug use among NA members in Iran based on a survey of 350 male NA members. **Main Findings: "The most important factors in reappearance of addiction in NA groups were unemployment and change in income (12.6%)….based on the findings of this study, it is suggested that provision of employment opportunities**

after quitting addiction can, to some extent, prevent the addiction recurrence."

26. Tajalli, F.B. & Kheiri, L. (2010). Locus of control in substance related and NA. *Procedia-Social and Behavioral Sciences*, 5, 1414-1417. Comparison of 30 actively addicted individuals to 30 NA members in Tehran, Iran**. Main Finding and Conclusion: "…there is a significant difference between N.A and addicted people on locus of control " (P. 1414) "anonymous addicts meetings are kind of communication with a social supportive context and emotional atmosphere that decrease the level of stress and depression of addicts and change some of their characteristics, and eventually raise their motivation for quitting and decrease their probability of returning to addiction."** (P. 1416)

27. Beygi, A. (2011). Spiritual development, socio-religious performance and quality of life in Narcotics Anonymous. *Journal of Knowledge & Health*, 6(2), 6-12. Study of spirituality dimensions as predictors of quality of life in 96 male NA members. **Main Findings and Conclusion: "Spiritual development and performance and socio-religious functions as subscales of spiritual experience were significant predictors of quality of Life in NA….It seems that active attendance in NA and following its 12 principles leads to the development of spiritual performance and socio-religious functions."** (P. 6)

28. Beygi, A., Farahani, M. N., & Mohammadkhani, S. (2011). The discriminative comparison of quality of life and coping styles in Narcotics Anonymous and methadone maintenance treatment members, *Journal of Research on Psychology and Health*, 5(1), 1-11. Study in comparing the quality of life and stress coping styles in narcotic anonymous (NA, 50 subjects) and methadone maintenance treatment (MMT, 50 subjects) members in Iran**. Major Findings: "…the interpersonal relationships, physical health, and task-oriented and avoidance-oriented coping styles in NA members was significantly higher in comparison with the mean scores in MMT members...actively attending in NA may enhance QoL and effective Coping styles."** (P. 1)

29. Khayatipour, A., Ghorban Shiroudi, S., & Khalatbari, J. (2011). Comparing effectiveness of combined cognitive–behavioral therapy in community therapy and Narcotic Anonymous groups on tendency to abuse drugs. *Jundishapur Scientific Medical Journal*, 9(6), 633-640. **Study comparing CBT, methadone treatment, and participation in NA in 75 subjects. CBT and NA were more effective than methadone in decreasing drug-seeking.**

30. Masuod, H. M., Akbar, Z. S. & Behrooz, S. (2011). A survey on the rate and the effective factors on the membership satisfaction of N.A. association in Andimeshk. *The Sociology of Youth Studies Quarterly*, 1(3), 33-54. Study assessing the factors affecting satisfaction of 260 NA members in Andimeshk.

Main Findings: "Significant relationship between the variables …were mental health of family and social levels, and eliminating or controlling the amount of pure drug, the amount of physical and mental health, leisure-time employment and unemployment and community levels, strengthening levels of spiritual beliefs, occupation, level of participation of members, unemployment and role of nutritional status have been effected in Andimeshk. Spending time and leisure variables, normal unemployment and spend health levels has direct effect on the whole."

31. Sanders, J. (2011). Feminist perspectives on 12-step recovery: A comparative descriptive analysis of women in Alcoholics Anonymous and Narcotics Anonymous. *Alcoholism Treatment Quarterly*, 29(4), 357-378. Analysis of two surveys of women in AA and NA, interviews with AA and NA members, and observations of AA and NA meetings. **Conclusions: 1) "…just as the second wave gave way to the third wave of the feminist movement, NA attracted more women and realized tremendous growth in the 1980s." [44% of Na membership] (p. 373), 2) "What is shared across women in the 12-Step movement is the veil of shame that is worn into recovery. By working the 12-Step program, women begin to shed this cloak." (P. 574).** (Also see: Sanders, J. (2014). *Women in Narcotics Anonymous: Overcoming stigma & shame*. New York, NY: Pelgrave Macmillan).

32. Beygi, A, Mohammadyfar, M., Farahani, M., & Mohammadkhani, S. (2012).The comparative study of coping styles and hope among Narcotic Anonymous and methadone maintenance treatment members, Research on Addiction, 5(2), 55-72. Study comparing the coping styles and hope among Narcotic Anonymous (50) and Methadone Maintenance Treatment (50) male members from Shahrood city. **Main Findings and Conclusion: "Results showed that Mean scores of agency thinking, task-oriented coping style, and avoidance-oriented coping style, in NA members was significantly high, from MMT members. It seems that actively attendance in NA may enhances effective Coping style and hope."** (P. 55)

33. Khodabandeh, F., Kahani, S., Shadnia, S., & Abdollahi, M. (2012). Comparison of the Efficacy of methadone maintenance Therapy vs. Narcotics Anonymous in the treatment of opioid addiction: A 2-Year Survey. *International Journal of Pharmacology*, 8(5), 1811-7775. Longitudinal follow-up comparison of clinical outcomes (with focus on retention) between NA participation (N=300) and methadone maintenance treatment (N=300) in Iran. **Main Finding and conclusion: "Seventy-four percent and 84% of patients remain in treatments in MMT and NA groups, respectively. The mean number of days in treatment was 210 days in MMT group compared to 270 days in NA group. There was no significant difference between 2 groups in this regard. Our findings suggest the usefulness of MMT in reducing opioid misuse but it does not have a statistically significant superior effect on key outcomes, including retention in treatment."** (P. 1)

34. Khodarahimi, S. & Rezaye, A. M. (2012). The effects of psychopathology and personality on substance abuse in twelve-step treatment programme abstainers, opiate substance abusers and a control sample. *Heroin Addiction and Related Clinical Problems*, 14(2), 35-48. 150 young adult male participants in Iran were divided into three groups; these comprised twelve-step [NA] treatment programme abstainers, opiate addicts and normal individuals. **Main NA-related Finding: "The twelve-step self-treatment programme significantly lowered psychopathology in patients with opiate abuse."** (P. 35)

35. Rahimpour, R., Khankeh, H. R., Khoshknab, M. F., Farhoodian, A. & Farzi, M. (2012). The evaluation of marital adjustment among the addicts in Isfahan NA groups and their couples. *Iranian Rehabilitation Journal*, 10(15), 13-17. Marital adjustment of male and female NA members and their spouses was assessed within two NA groups in Isfahan, Iran (124 participants; 62 couples). **Main Finding and Conclusion: "…marital adjustment between addicts and their couples face severe problems and considering the prevalence of addiction requires more attention."** (P. 17) [18% of NA couples tested as well adjusted; 82% as not well adjusted]

36. Salehmoghaddam, A. R., Kahani, H. B., Vagheii, S., & Chamanzari, H. (2012). Evaluation of detoxified addicts's life quality participating in narcotics anonymous, therapeutic community and who refers to methadone therapy clinics sessions in Mashhad, *Res Devel Nurs Midw*. Comparative study of the quality of life of detoxified opioid addicts participating in NA, a therapeutic community and methadone therapy clinics sessions (27 in each of the three groups) in Mashhad, Iran. **Major Findings: Pretest-posttest study of 27 NA members, 27 members of a therapeutic community and 23 patients in methadone treatment. Main Findings: "…participating in the sessions of all groups led to increased quality of life. In all eight aspects of program, the scores of Narcotics Anonymous group were significantly higher than those of other groups. Conclusion: because of significant effect on quality of life, we recommend applying these approaches, especially Narcotics Anonymous."**

37. Sanders, J. (2012). Use of mutual support to counteract the effects of socially constructed stigma: Gender and drug addiction. *Journal of Groups in Addiction & Recovery*, 7(2-4), 237-252. Survey of 92 women NA members in U.S. **Main Findings: "Unexpectedly, women from a more socially disadvantaged background do not necessarily experience more stigma than their more privileged white, middle-class counterparts. Not surprisingly, women who have been involved in NA for longer periods of time and have completed the Twelve Steps perceive the least amount of stigma."** (p. 237)

38. Zare, H., Alipoor, A., Aghamohammadhasani, P., Nazer, M., Mokhtaree, M., & Sayadi, A. (2012). Assessment role of participation in narcotic anonymous in opiate dependents during abstinence. *Zahedan J Rese Med Sci.*, 14(9), 42-6. Randomized trial of post-SUD treatment of 240 patients in Iran with half (120) referred to NA and half (120) not referred to NA. **Main Findings and Conclusion: "The [SUD] recurrence rate at 12 months was significantly lower in the NA group compared to the control group….The findings of the research support a better prognosis for participants of NA group."** (P. 42)

39. Galanter, M., Dermatis, H., Post, S. & Santucci, C. (2013). Abstinence from drugs of abuse in community-based members of Narcotics Anonymous. *Journal of Studies on Alcohol and Drugs, 74*(1), 1-4. Survey of 10 NA groups from California, Pennsylvania, and Florida (396 members) using a 51-item self-administered questionnaire. Respondents reported an average of 5.7 years since their last drug use, high rates of sponsorship (88.6%), and a substantial rate of NA service activity (47.5%). **Conclusion: "twelve-step membership in NA may serve as a useful and cost-free means of bolstering the benefits of professional care."** (P.4)

40. Galanter, M., Dermatis, H., Post, S., & Sampson, C. (2013). Spirituality-based recovery from drug addiction in the Twelve-Step fellowship of Narcotics Anonymous. *Journal of Addiction Medicine*, 7(3), 189-195. 527 NA members in the U.S. were surveyed regarding role of spirituality in the NA recovery process. **Conclusion: "Spiritual renewal combined with an abstinence-oriented regimen in Narcotics Anonymous social context can play a role in long-term recovery from drug addiction."** (p. 189)

41. Ghodrati, T.A., Sahbaei, F., Nabavi, S.J.. & Zare, M. (2013). Comparing continuity quit addiction time in participant persons and non participant persons in Narcotics Anonymous in City of Mashhad in 2012. *Medical Sciences Journal*, 23(3), 201-5. Study comparing post-detoxification outcomes of 300 patients participating or not participating in NA. **Conclusion: "This study showed that participating in the meetings of Narcotics Anonymous increases the duration of the time of quit addiction."** (P. 201)

42. Sotodeh Asl, N., Behnam, B., & Ghorbani, R. (2013), Effectiveness of Narcotics Anonymous training programs in personality characters in substance abuse patients, *Koomesh*, 14(3), 316-20. Study of the effects of narcotics anonymous (NA) program on personality characters in 100 addiction treatment patients in Iran compared to those not participating in NA. **Conclusion: "According to the findings of this work, we suggest the effectiveness of NA program in changing personality characters of the patients with substance abuse."** (P. 316)

43. Akhondzadeh, S., Shabrang, M., Rezaei, O., & Rezaei, F. (2014). Personality patterns in Narcotics Anonymous members versus individuals with addiction receiving methadone maintenance therapy, *Iranian Journal of Psychiatry*, 9(3), 158-162. Comparative study of 100 NA members and 100 methadone maintenance patients in Iran. **Conclusion: "People who regularly attended the NA sessions had lower neuroticism and higher agreeableness than patients who were under the maintenance modality. Whether this is the cause or effect of attending NA sessions requires future large-scale cohort studies."** (P. 158)

44. Galanter, M., Dermatis, H. & Sampson, C. (2014). Narcotics Anonymous: A comparison of military veterans and non-veterans. *Journal of Addictive Diseases*, 33(3), 187-95. Survey of 508 NA members. **Major Findings: Veterans (172) were more likely to have been referred by a professional than were non-veterans (77% vs. 27%, respectively); 70% had been hospitalized for alcohol or drug problems, and 51% had been treated for non-substance psychological problems. The 70% of veterans who reported at least 1 of 3 service-related stressful experiences were more likely to report PTSD-related symptoms. NA can serve as a recovery resource for certain veterans with substance use disorders, with or without PTSD."** (P. 187)

45. Kelly, J. F., Greene, M. C., & Bergman, B. C. (2014). Do drug-dependent patients attending Alcoholics Anonymous rather than Narcotics Anonymous do as well? A prospective, lagged, matching analysis. Alcohol and Alcoholism, 49(6), 645-653. **279 young adults in SUD treatment were assessed at intake, and 3, 6, and 12 months post-treatment. Major Finding: "Drug patients may be at no greater risk of discontinuation or diminished recovery benefit from participation in AA relative to NA. Findings may boost clinical confidence in making AA referrals for drug patients when NA is less available." (P. 645)**

46. Snyder, J. K. & Fessler, D. M. T. (2014). Narcotics Anonymous: Anonymity, admiration, and prestige in an egalitarian community. *Journal of the Society of Psychological Anthropology*, 42(4), 440-459. https://doi.org/10.1111/etho.12063. Study of anonymity and status structure in NA. **Main Finding: "…in spite of the overtly egalitarian context, NA members differ dramatically in prestige, with more experienced members being admired and emulated. Critically, prestige acquisition occurs via structural functions that are central to the maintenance of the institution, as experienced members serve a central role in the transmission and enforcement of cultural norms, paradoxically including norms of egalitarianism."** (P. 440)

47. Taallaei, A., Moghaddam, A. S., Kahani, H. B., & Vaghei, S. (2014). Evaluation of detoxified addicts' life quality participating in Narcotics Anonymous,

therapeutic community and who refer to methadone therapy clinics in Mashhad, 2012. *Journal of Research Development in Nursing & Midwifery*, 10, 28-35. A three-group pretest-posttest study of 27 members of narcotics anonymous, 27 therapeutic community residents and 23 methadone treatment patients. **Major Findings and Conclusion: "…participating in the sessions of all groups led to increased quality of life. In all eight measures, the scores of Narcotics Anonymous group were significantly higher than those of other groups. Because of significant effect on quality of life, we recommend applying these approaches, especially Narcotics Anonymous."** (P. 28)

48. Zandasta, E., Seddigh, S. M. & Namazi, S. (2014). Comparison of the personal characteristics of the recovered men through Narcotics Anonymous self-help groups with those who have been recovered without attending these groups. *American Journal of Life Science Research*, 2(1), 1-7. Study in Iran comparing 30 NA members with at least 1 year of abstinence with 30 men in recovery without NA participation. **Main Findings: "…recovered addicts using NA methods have had higher scores in neurosis, openness and conscientiousness compared to other recovered individuals, while no significant difference between two groups was observed about their extroversion, flexibility and novelty."** (P. 1)

49. Abbas, G. T., Maliheh, P., Majid, H., Hadi, A. & Hashem, H. (2015). The impact of client's education in Narcotics Anonymous meetings on tendency to use drugs. Journal of Torbat Heydariyeh University of medical sciences (Journal of Health Chimes), 2(4). 17-22. Iranian study comparing outcomes of NA participation to a non-participating control group. **Main Finding and Conclusion: "Education in the NA meetings probably results in fewer tendencies to use drugs. Therefore, organizations and responsible centers should support the clients to continue addiction treatment by holding the meetings in a better condition."** (P. 17)

50. Day, E., Wall, R., Chohan, G. & Seddon, J. (2015) Perceptions of professional drug treatment staff in England about client barriers to Narcotics Anonymous attendance, *Addiction Research & Theory*, 23, 3, 223-230. Survey of 58 substance misuse treatment professionals was conducted between January and April 2012 in Birmingham, England. **Main Findings: "Perceived objections to core elements of the 12 step programme (religious nature of the programme, powerlessness, surrender, desire to stop using drugs) were major obstacles to recommending NA attendance."** (P. 223)

51. DeLucia, C., Bergman, B. G., Formoso, D., & Weinberg, L. B. (2015). Recovery in Narcotics Anonymous from the perspectives of long-term members: A qualitative study. *Journal of Groups in Addiction & Recovery*, 10(1), 3-22. Focus group of 11 NA members from five U.S. States about key recovery mechanisms and processes and recovery-related quality of life. **Conclusion: "…the potential for positive gains in interpersonal relationships,**

becoming part of a larger cohesive community, and an enhanced sense of psychological well-being might be offered as potential benefits of involvement to individuals contemplating 12-step recovery for a substance use problem." (p. 18)

52. Haghgoie-Isfahani, M., Nili-Ahmadabadi, A., Arman-Mehr, V., & Moradi-Kalelo, N. (2015). Lived experiences of participants of factors affecting the drug stability(Narcotics Anonymous). *J Qual Res Health Sci*, 4(2): 125-136. Qualitative interviews with 18 NA members in Isfahan, Iran. **Main Findings: "…the most effective factor in drug withdrawal stability is receiving cognitive support from sympathizers (other members of the association). This support results in the changing of attitudes and self-awareness. Other factors that have impact on drug withdrawal stability included reforming family relationships, receiving emotional support and support regarding dignity from family members, increasing of confidence, and recovery of social status."** (P. 125)

53. Hashemianfar, S., Esmaeeli, R., Rahimi, M., Samineh, B. J., Aghababaian, A., Hejazi, S. N., & Yaghoobi, K. (2015). Lived experience of NA in the cycle of recovery from addiction. *International Research Journal of Social Science Management*, 2, 51-56. **UNABLE TO ACQUIRE IN ENGLISH LANGUAGE**

54. Kalantarkousheh, S. M. (2015). Cognitive emotion regulation strategies among regular persons and participants in methadone or Narcotics Anonymous treatment programs. *Studies in Social Sciences and Humanities*, 2(3). Comparison of 40 NA members, 40 patients in methadone maintenance treatment (MMT), and 40 non-addicted normal control group in Iran. **Main Findings: "….persons under methadone treatment use emotional regulation strategies more than normal persons and those under NA treatment….individuals who can use emotional regulation strategies show little tendency toward addiction."** (P. 131)

55. Mansooreh, H. H. (2015). Addicts' quality of life and psychological disorders (depression, anxiety, and stress) in two treatment methods: Narcotics Anonymous vs. methadone maintenance treatment. *Research on Addiction*, 9(35), 119-136. Survey of 110 male NA members compared with survey of 107 patients in methadone maintenance treatment in Shahrekord City, Iran. **Main Findings and Conclusion: "An increase in the membership duration in NA was associated with lower levels of depression and physical pain and higher levels of general health and positive emotions…Therapeutic community approach [NA] was revealed to be more adequate in improving the quality of life and reducing psychological disorders, and may be considered a desired method of treatment."** (P. 35)

56. Peles, E. Sason, A., Tene, O., Domany, Y., Schreiber, S., & Adelson, M. (2015). Ten years of abstinence in former opiate addicts: Medication-free non-

patients compared to methadone maintenance patients. *Journal of Addictive Dis*eases, 34(4), 284-295. Comparison of 55 long-term (10+ years) methadone maintained with 99 long-term former opioid addicts in NA. Main Findings: **"Groups were comparable in age and education, but the medication-free subjects were younger when having started opioids with more severe addiction scores. Methadone maintained patients presented with a higher proportion of psychiatric comorbidity and chronic pain. Their scores of perceived sleep quality and cognitive state were poorer than the medication-free individuals"** (P. 284).

57. Torbati, A. G., Pashib, M., Hassanzadeh, M., Alizadeh, H. & Heshmati, H. (2015). The impact of client's education in the Narcotics Anonymous meetings on tendency to use drugs. *Journal of Torbat Heydariyeh University of Medical Sciences*, 2(3), 17-22. A clinical trial study comparing people who participated in NA for 3 months compared to a control group with no intervention. **Main Findings and Conclusion: "The participation of clients in the Narcotics Anonymous meetings was effective on tendency to use drugs ….Based on the results, education in the NA meetings probably results in fewer tendencies to use drugs. Therefore, organizations and responsible centers should support the clients to continue addiction treatment by holding the meetings in a better condition."** (P. 17)

58. Azkhosh, M., Farhoudianm, A., Saadati, H., Shoaee, F. & Lashani, L. (2016). Comparing acceptance and commitment group therapy and 12-steps Narcotic Anonymous in addict's rehabilitation process. *Iranian Journal of Psychiatry*, 11(4), 244-249. A randomized controlled trial comparing 3 groups with 20 subjects each: acceptance and commitment group therapy (Twelve 90-minute sessions), Narcotics Anonymous group, and a control group who received usual methadone maintenance treatment. **Main Findings: "Repeated measure analysis of variance revealed that the mean difference between the three groups was significant (P<0.05) and that acceptance and commitment therapy group showed improvement relative to the NA and control groups on psychological well-being and psychological flexibility."** (P. 244)

59. DeLucia, C., Bergman, B. G., Beitra, D., Howrey, H. L., Seibert, S., Ellis, A. E., & Mizrachi, J. (2016). Beyond abstinence: An examination of psychological well-being in members of Narcotics Anonymous. *Journal of Happiness Studies*, 17, 817–832. Study of the psychological well-being of 128 U.S. NA members. **Main Findings and Conclusion: "…abstinence duration and the recovery predictors accounted for significant incremental variance in three of four psychological well-being domains. As a complement to studies on short-term benefits of mutual help organizations, these data suggest ongoing recovery involvement may be positively associated with subjective psychological well-being in NA members."** (P. 817)

60. Hosseini, F., Ardekani, S. M. Y., Kordi, A., Farzinrad, B., & Musazadeh, M. (2016). Quality of life among Narcotic Anonymous male members in Yazd City, Iran. *International Journal of High Risk Behavior & Addiction*, e31275 DOI: 10.5812/ijhrba.31275. Study of the quality of life of 368 NA members in Iran. **Main Findings and Conclusion: "…there was a significant difference between age, marital status, drug type used and length of abstinence with domains of QoL….The findings of the current study show that consistent participation in NA self-help groups can significantly lead to an increase in QoL."**

61. Navid, K., Khiavi, F. F., Nezzgad, S. Z., Fathi, K., & Haghighi, M. H. (2016). Drug abstinence self-efficacy among addicted men who stopped taking drugs and participating in therapeutic community, Narcotic Anonymous and methadone maintenance treatment groups in Ahvaz City, Iran. International Journal of *Pharmaceutical Research & Allied Sciences*, 5(2), 75-81. Study comparing Drug Abstinence Self-Efficacy (DASE) among participants of Therapeutic Community(TC), Narcotic Anonymous(NA), and Methadone Maintenance Treatment (MMT) Groups (47 subjects in each group) in Ahvaz, Iran. **Main Finding: "Self-efficiency in abstinence of drugs is an important factor to maintain the purity of the drug left addicts who attend in the meetings and is higher in addicts of Narcotics Anonymous compared with the therapeutic community and methadone treatment is higher and therefore, along with other treatments of disease, continued presence of patients in Narcotics Anonymous meetings is also suggested."** (P. 79)

62. White, W., Galanter, M., Humphreys, K., & Kelly, J. (2016). The paucity of attention to Narcotics Anonymous in current public, professional, and policy responses to rising opioid addiction. *Alcoholism Treatment Quarterly*, 34 (4), 437-462. Survey of NA-related research and commentary: **Main Findings and Conclusion: "The potential role of Narcotics Anonymous (NA) as a recovery support resource is rarely noted within recent media and professional reports addressing opioid addiction. In this brief review and commentary, the authors compare public and professional misconceptions about NA with the findings of available scientific studies of NA. The authors conclude that NA is an underutilized resource in contemporary responses to opioid addiction."** (P. 437)

63. Bøg, M., Filges, T, Brännström, L., Jørgensen, A-M. K.. & Fredrikksson, M. K. (2017) 12-step programs for reducing illicit drug use. *Campbell Systematic Reviews*, https://doi.org/10.4073/csr.2017.2. Review of the 10 most rigorous studies of NA and other 12-Step programs. **Conclusions: "The power to detect a difference between the 12-step interventions and alternative psychosocial interventions was low and the estimated effect sizes were small. Many studies failed to adjust for the fact that the intervention is administered to groups, and so may overestimate effects. Given all these**

shortcomings, further evidence regarding the effectiveness of this type of intervention, especially in self-help groups, is needed….12-step programs for reducing illicit drug use are neither better nor worse than other interventions."

64. Christensen, P. (2017). The program is perfect: Narcotics Anonymous and the managing of the American addict. *Medicine Anthropology Theory*, 41, 23-27. Study of the recovery process based on interviews with 9 NA members with—includes extensive commentary. **Summary: "This article examines Narcotics Anonymous (NA) membership in two ways: how blame for failure is displaced from the 'perfect' organizational program and onto the individual addict working to remain sober and how this displacement is accompanied by notions of individual responsibility and work. These discourses illustrate the influence of a neoliberal outlook on the life course among 'clean' NA members, particularly as the social safety net in the United States has been systematically reduced and replaced by a system that focuses attention on personal responsibility. I show how NA's ideological approach blinds group members and the larger public to the complexity of addiction, turning addicts who struggle with recovery into failures, through internalized ideological trajectories that root responsibility in the self while discounting context."** (P. 23)

65. Gilman, M., & Littlewood, R. (2017). A pilot survey of hepatitis C knowledge and awareness of novel treatment options engaged with Narcotics Anonymous: How can group therapy help? *Journal of Groups in Addiction & Recovery*, 1, 37-44. Survey of 8 NA members. **Main Findings and Conclusion: "Thirty-eight people in Narcotics Anonymous completed a pilot survey. All were abstinent but had engaged in risk behavior for HCV. Forty-two percent thought it was difficult to engage for HCV therapy, 65% stated it was hard to access novel treatments, and 97% considered that people in Narcotics Anonymous should find out information about novel HCV therapy. Groups present an important option for promoting engagement in HCV."** (P. 37)

66. Radziwiłłowicz, W. & Karolewska, I. (2017). Temporal orientation and self-experience of Narcotics Anonymous. *Alcoholism and Drug Addiction*, 30(1):59-84. doi: 10.5114/ain.2017.68443. Study of 30 men and women in NA. **Main findings: "The persons who have a sponsor show less negative attitude towards the past. Those on service for NA have a greater sense of self-consistency and are less focused on the negative past. Those who act as a sponsor exhibit greater sense of self-consistency and self-identity, in the perception of the present are characterised by lower fatalism."**

67. Soltaninejad, A., Barshan, A., Dortajsani, S., Anaraki, M., &Saberi, R. (2017). On the comparison of the effectiveness of self-acceptance group therapy by Dryden method with teachings of Narcotics Anonymous groups (NA) in addicts'

mental health in Kerman City. *Journal of Research on Addiction*, 11 (41), 49-63. Comparison of mental health between 21 participants receiving 10 group therapy sessions with self-acceptance approach and 27 participants participating in NA for six months. **Main Findings and Conclusion: "The results showed that teachings of NA groups were more effective in addicts' mental health and the reduction of physical and depression symptoms compared to self-acceptance group therapy by Dryden's approach….In comparison to group therapy, the teachings of NA groups are more effective in the treatment of physical and depression symptoms and the improvement of mental health in addicts due to the creation of a sense of empathy and freedom of selection."** (P. 49)

68. Emamgholi, Z., Sharifi, S., Allameh, Y., Shahmohammadi, A., & Babakhanian, M. (2018). Comparing the lifestyle and sexual satisfaction of patients received methadone maintenance therapy with those of patients received Narcotics Anonymous, *Middle East J Rehabil Health Stud*., 5(1):e60469. doi: 10.5812/mejrh.60469. A cross-sectional study in Iran of 50 patients who received Narcotics Anonymous compared with 50 patients who underwent methadone maintenance treatment (MMT). **Main Findings: "The MMT group achieved higher scores in the subscale of weight control and nutrition, disease prevention, mental health, social health, drug prevention, accident prevention, and environmental health. However, the difference between the 2 groups in components of health, exercise and fitness, and mental health was not significant. Furthermore, independent t-test results showed that the 2 groups have no significant difference in sexual satisfaction. The findings indicated the higher effectiveness of methadone maintenance therapy in MMT group compared to Narcotics Anonymous. It can be stated that the lifestyle was partly modified due to the avoidance of substance abuse in methadone maintenance treatment."**

69. Shiraly, R. & Taghva, M. (2018). Factors associated with sustained remission among chronic opioid users. *Addict Health*, 10(2), 86-94. Comparison of chronic opioid users in Shiraz, Iran who achieved past-year sustained remission (365 subjects) with chronic opioid users who did not achieve past-year remission (187 subjects. **Main Findings and Conclusion: "Our findings showed that sustained remission was associated with Narcotic Anonymous. Participation in self-help groups can be a suitable alternative in predicting sustained remission among chronic opiate users. Chronic opioid users should be encouraged by the physicians who are involved in the treatment of drug addiction to participate in NA programs."** (P. 86)

70. Agus, T. N., Pipit, F., Wingki, S. E., Setia, P. K., Yuliani, W. & Bachtiar, S. (2019). The effect of Narcotics Anonymous meeting toward relapse prevention among prisoners. *Indian Journal of Public Health Research & Development*, 10(3), 667-671). 3-month follow-up study following initiation of NA participation among addicted prisoners in India. **Main Findings and Conclusion: "…there**

is significant effect of NA Meeting toward relapse prevention among prisoner….Interventions focusing on support group, education and rehabilitation may improve relapse prevention among prisoner." (P. 667)

71. Galanter, M., White, W., & Hunter, B. (2019). Cross-cultural acceptability of the Twelve Step model: A comparison of Narcotics Anonymous in the USA and Iran. *Journal of Addiction Medicine*. Apr 1. doi: 10.1097/ADM.0000000000000526. Survey comparison of 262 NA members in Iran and 527 NA members in the U.S. **Main Findings: "NA in Iran reports 21,974 meetings. NA, a 12-step program developed in a Western, predominantly Christian-oriented country, was adapted widely in the Islamic Republic of Iran, a setting different in culture, language, ethnicity, and religious orientation. The growth in its membership derives, in part, from specific innovations that may have broader applicability in other settings."** (P. 1)

72. Jalali, R., Moradi, A., Dehghan, F., Merzai, S., & Alikhani, M. (2019). The exploration of factors related to treatment retention in Narcotics Anonymous members: a qualitative study. *Subst Abuse Treat Prev Policy,* 14(1), 14. Published 2019 Apr 11. doi:10.1186/s13011-019-0205-6 **Main Findings: "*…*two main categories had emerged: "personal-psychological" and "social" factors. Personal-psychological" factors includes: self-knowledge, change of attitude, self-confidence, consistency in treatment, living in the moment and "social" factors include interaction with others, group of sympathizers, reformation of social and familial relationships, reclaiming the social position, supports received from others, and supports received from the generalized network."**

73. Mokhtari, M. R., Alavi, M. Pahlavanzadeh, S. ….. & Cleary, M. (2019). Comparison of the effectiveness of a 12 step substance use recovery program on quality of life. *Nursing and Health Sciences*, November. DOI: 10.1111/nhs.12668 Study assessing the effects of 12 step program (NA) participation on health-related quality of life for Iranian individuals seeking to recover from addiction comparing to those without such participation. **Main Findings: "The treatment (NA) group improved in all aspects of health-related quality of life….The benefits to quality of life related to mental health recovery extended beyond the treatment program, indicating that the program principles were effectively implemented in daily life."**

74. Galanter, M., White, W., & Hunter, B. (2020, in press) An empirical study on the construct of "God" in the Twelve Step Process. Survey of 450 NA members in 9 U.S. states regarding the role of belief in "God, as we understood him" within their NA experience. *Journal of Addiction Medicine*. **Main Findings: The majority of surveyed NA members reported spirituality as an important aspect of their recovery but 21% of those surveyed identified themselves as atheists or agnostics and there was a wide diversity in expressed**

understandings of "God" or "Higher Power." Expressed belief in God was associated with less reported craving and depression

Published English Language Studies of 12-Step Programs that Include NA Members in the Study Population (1989-2020)

1. McCown, W. (1989). The relationship between impulsivity, empathy and involvement in Twelve Step self-help substance abuse treatment groups. *British Journal of Addiction*, 84, 391-393. Survey of 150 members from three recovery clubhouses on degree of impulsivity and empathy. **Main Findings: "A significant—though fairly modest—correlation was found between impulsivity and both length of sobriety and number of 'slips'. Interestingly, the total length of involvement in life to date with self-help groups was positively and significantly associated with impulsivity. One interpretation of this data is that the impulsive person makes relatively early contact with self-help groups, and then has many false starts on the road to abstinence. As predicted empathy was associated with both Twelve Step self-help involvement and abstinence."** (P. 392)

2. Alford, G. S., Koehler, R. A., & Leonard, J. (1991). Alcoholics Anonymous-Narcotics Anonymous model inpatient treatment of chemically dependent adolescents: A 2-year outcome study. *Journal of Studies of Alcohol*, 52, 118-126. **Major Finding: "Results indicated that the AA/NA model is a promising approach in treating chemically dependent adolescents, but that much attention to relapse prevention methods is necessary."** (P. 118)

3. Gifford, P. D. (1991). A.A. and N.A. for adolescents. *Child & Adolescent Substance Abuse*, 1(3), 101120. Overview of AA and NA program with recommendation for its use as a referral by helping professionals. **"N.A. grows because it is effective, because it fills needs, and because society so desperately needs its work."** (P. 118)

4. Chappel, J. N. (1992). Effective use of Alcoholics Anonymous and Narcotics Anonymous in treating patients. *Psychiatric Annals*, 22(8), 409-418. Description of AA and NA recovery program. **"In this task [treating addiction], AA, NA and other 12-step programs provide powerful psychosocial therapies that can enhance psychiatric treatment."** (P. 418)

5. Kramer, T. H., & Hoisington, D. (1992). Use of AA and NA in the treatment of chemical dependencies of traumatic brain injury survivors. *Brain Injury*, 6(1), 81-88. **Main Findings: Alcoholics Anonymous and Narcotics Anonymous have been under-utilized in the treatment of chemical dependency in traumatic brain injury survivors. Both offer a social support network and a self-help recovery programme….observations and suggestions are offered which**

may help in incorporating this therapeutic modality which is the most widespread treatment of individuals with chemical dependencies." (P. 81)

6. Anderson, T. L. (1993). Types of identity transformation in drug using and recovery careers. *Sociological Focus*, 26(2), 133-145. 30 members of N.A. and A. A. in the Washington D.C. area were interviewed to identify evolutions in personal identity through the course of addiction and recovery. **Main finding: Findings revel a new type of identity transformation (i.e., temporary conversion) and also uncover other extant types of transformation (i.e., alteration and conversion) that were unexpected."** (P. 133)

7. Johnsen, E. & Herringer, L. G. (1993). A note on the utilization of common support activities and relapse following substance abuse treatment. *The Journal of Psychology*, 127(1), 73-78. 50 patients were followed after discharge from addiction treatment. **Major Finding: "Attendance at aftercare meetings and attendance at Alcoholics Anonymous or Narcotics Anonymous meetings were significantly related to post-treatment abstinence."** (P. 73.)
8. Room, R., & Greenfield, T. (1993). Alcoholics anonymous, other 12-step movements and psychotherapy in the US population, 1990. *Addiction*, 88(4), 555-562. Population survey of 12-Step participation among U.S. adults. **Main NA-related Findings: "Five per cent of the population reports ever having attended a non-12-step support [NA, CA, etc.] or therapy group for a non-alcohol problem, and half as many report having done so in the last year. This proportion is substantially lower than attendance at AA alone. Together, 12-step programs emerge as the most widely diffused form of group help seeking/group therapy in the US population."** (P. 559)

9. Smith, D. E., Buxton, M. E., Bilal, R., &Seymour R. B. (1993). Cultural points of resistance to the 12-Step recovery process. *Journal of Psychoactive Drugs*, 25(1), 97-108. **Key Discussion Points: "Cultural points of resistance to the recovery process are also addressed, including the perception that 12-Step fellowships are exclusive and confused with religion, confusion over surrender versus powerlessness, and concerns about low self-esteem, dysfunctional family structure, communication difficulties, and institutionalized and internalized racism. …The challenge is to adapt the process of recovery to all cultures and races, to counter stereotypes on all sides, and to eliminate the perception that recovery only works for addicts from the White mainstream."** (P. 97)

10. Gold, M. S. (1994). Neurobiology of addiction and recovery: The brain, the drive for the drug, and the 12-step fellowship [comment]. *Journal of Substance Abuse Treatment*, 11(2), 93-97. Discussion of the value of AA and other 12-Step programs within the context of recent studies of the neurobiology of addiction. **Conclusion: "AA is more than an alternative treatment program - It is a way of life and a complex relapse prevention program that can work for all drugs of abuse."** (P. 97)

11. Sibthorpe, B., Fleming, D., & Gould, J. (1994). Self-help groups: A key to HIV risk reduction for high-risk drug users? *Journal of AIDS*, 7(6), 592-598. 317 injection drug users followed for 6 months to assess role of mutual id group participation in HIV risk reduction. **Conclusion: "…self-help groups may play an important role in reducing the risk of HIV in out-of-treatment populations."** (P. 592) [44% of total meetings attended by participants were NA meetings].

12. Johnson, N. P., & Chappel, J. N. (1994). Using AA and other 12-step programs more effectively. *Journal of Substance Abuse Treatment*, 11(2), 137-142. **Conclusions: "In referring clients to AA or NA groups, therapists should consider additional factors that may influence their clients' decision. These include availability of temporary contacts or recovery guides who agree to help new clients, spirituality emphasized by some groups, expenses, continuous availability, and babysitting services."** (P. 137)

13. McKay, J. R., Alterman, A.I., McLellan, A. T., & Snider, E. C. (1994). Treatment goals, continuity of care, and outcome in a day hospital substance abuse rehabilitation program. *American Journal of Psychiatry*, 151(2), 254-259. Study of clinical outcomes of 180 alcohol- or cocaine-dependent male patients treated in Veterans Administration SUD program. **Main Findings: "Patients who complete day hospital substance abuse rehabilitation and then continue to participate in self-help groups are likely to have lower rates of alcohol and cocaine use during follow-up. Furthermore, the beneficial effect of self-help group participation does not appear to be strictly the result of motivation or some other patient characteristic."** (P. 254)

14. Riordan, R. J., & Walsh. L. (1994). Guidelines for professional referral to Alcoholics Anonymous and other twelve step groups. *Journal of Counseling and Development*, 72, 351-355. **General discussion of 12-step programs including criticisms and recommended referral options.**

15. Wells, E. A., Peterson, P. L., Gainey, R. R., Hawkins, J. D., & Catalano, R. F. (1994). Outpatient treatment for cocaine abuse: A controlled comparison of relapse prevention and twelve-step approaches. *American Journal of Drug and Alcohol Abuse*, 20(1), 1-17. Study of 92 SUD-treatment-seeking adults were alternately assigned to relapse prevention or 12-step treatment with assessment at baseline, 12 weeks post-treatment, and 6-month follow-up. **Main Findings: "Subjects in both treatment conditions reduced cocaine, marijuana, and alcohol use at posttreatment. Subjects receiving 12-step treatment showed greater improvement in alcohol use from posttreatment to 6-mo follow-up than did Subjects in relapse prevention programs."** (P. 1)

16. Troyer, T.N., Acampora, A.P., O'Connor, L.E. & Berry, J.W. (1995). The changing relationship between therapeutic communities and 12-step programs: A survey. *Journal of Psychoactive Drugs*, 27(2), 177-180. Survey of 67 therapeutic

communities who are members of Therapeutic Communities of America regarding relationship between TCs and 12-Step fellowships. **Conclusion: 1) "60 (90%) report having 12-Step meetings on their premises…51(76%) have AA meetings, 44 (66%) have NA meetings…",** (P. 178) 2) **"TCs today are increasingly accepting 12-Step programs as a useful part of the therapy available for client in recovery from drug addiction."** (p. 180)

17. Freimuth, M. (1996). Psychotherapists' beliefs about the benefits of 12-Step groups. *Alcoholism Treatment Quarterly*, 14(3), 95-102. Survey of 97 psychotherapists in the U.S. **Main finding: Psychotherapists are not only open to working with patients in 12-Step groups but they also believe there are multiple benefits to their patients involvement."** (P. 100)

18. Weiss, R. D., Griffin, M. L., Najavits, L. M., Hufford, C., Kogan, J., Thompson, H. J., . . . Siqueland, L. (1996). Self-help activities in cocaine dependent patients entering treatment: results from NIDA collaborative cocaine treatment study. Drug and Alcohol Dependence, 43(1-2), 79-86. Self-help activities (NA, AA, CA, etc.) of 519 cocaine-dependent patients entering psychotherapy were assessed over time. **Main Finding: "Of self-help attenders who actively participated, 55% initiated abstinence within the next month, compared with 40% of non-attenders and 38% of non-participating attenders."** (p. 79).

19. Humphreys, K., Mavis, B. E., & Stoffelmayr, B. E. (1994). Are twelve-step programs appropriate for disenfranchised groups? Evidence from a study of posttreatment mutual help group involvement. *Prevention in Human Services*, 11(1), 165-179. 12-Step participation patterns of 558 patients treated for SUD were followed up one year after their intake. **Main Findings and Conclusion: "There were no significant differences in attendees and non-attendees on race, gender, education, employment pattern, or marital status….Overall the findings suggest that 12 step programs both appeal to and benefit disenfranchised groups."**

20. Woff, I., Toumbourou, J., Herlihy, E., Hamilton, M., & Wales, S. (1996). Service providers' perceptions of substance use self-help groups. *Substance Use. & Misuse*, 31(10), 1241-1258. Study of 113 drug treatment professionals from 54 treatment agencies in Australia regarding attitudes toward value of self-help groups in addiction recovery. **Key Findings: "Professionals indicated that they perceived SHGs [self-help groups] to be generally helpful for persons with substance use problems. Provision of social support was the most commonly perceived helpful aspect of SHGs, and unsuitability for some clients was the most commonly perceived unhelpful aspect. Persons motivated to address their problems were those perceived to be most likely to find a SHG useful, with those not so motivated, or who deny their problem, being perceived to be least likely to find a SHG useful. Drug and alcohol user treatment specialists reported greater perceived failure of**

SHGs to address underlying psychopathology and greater perceived benefit for clients lacking social support." (P. 1241)

21. Humphreys, K. (1997). Clinicians' referral and matching of substance abuse patients to self- help groups after treatment. *Psychiatric Services*, 48, 1445-1449. 389 Directors of VA SUD treatment were surveyed regarding mutual aid referral practices. **Main Findings: "…a large proportion of substance abuse patients [treated within VA addiction treatment programs] were referred to Alcoholics Anonymous (79.4%)[45% to NA], with other self-help organizations receiving a smaller but significant number of referrals. Referrals to 12-step self-help organizations were more common in programs that endorsed a 12-step treatment orientation and that employed a higher proportion of staff members in recovery from substance use disorders….clinicians were less likely to make a referral to a 12-step program if a patient was an atheist, had a comorbid psychiatric disorder, or had less severe substance abuse problems."** (P. 1445)

22. Humphreys, K., & Noke, J. M. (1997). The influence of posttreatment mutual help group participation on the friendship networks of substance abuse patients. *American Journal of Community Psychology*, 25(1), 1–16. A 1-year longitudinal study examining effects of mutual aid participation on 2,337 males admitted to inpatient SUD treatment. **Main Finding: "Twelve-step group involvement after treatment predicted better general friendship characteristics (e.g., number of close friends) and substance abuse-specific friendship characteristics (e.g., proportion of friends who abstain from drugs and alcohol) at follow-up."** (P. 1)

23. Green, L. L., Fullilove, M. T. & Fullilove, R. E. (1998). Stories of Spiritual Awakening - The Nature of Spirituality in Recovery. *Journal of Substance Abuse Treatment*, 15(4), p. 325-331. 24 patients in outpatient SUD treatment discussed role of spirituality in recovery within focus groups. **Main Findings: "The stories presented here suggest a number of ways in which the spiritual awakening of 12-step fellowship can be supported as part of addiction treatment services. The path of the Higher Power was a highly individualized one. In fact, the search for a Higher Power "of one's understanding" was emphasized in the 12-step fellowship. Discussing the ways in which an individual might find a Higher Power, as well as discussing past experiences that might interfere with such a task, can be an important part of therapy."** (P. 331)

24. Chappel, J. N., & DuPont, R. L. (1999). Twelve-step and mutual-help programs for addictive disorders. *Psychiatric Clinics of North America*, 22(2), 425-446. General discussion of 12-Step programs and guidelines to help physicians make referrals to AA, NA, and other 12-Step programs.

25. Etheridge, R. M., Craddock, S. G., Hubbard, R. L., & Rounds-Bryant, J. L. (1999). The relationship of counseling and self-help participation to patient outcomes in DATOS. *Drug and Alcohol Dependence*, 57(2), 99-112. Follow-up study of 927 patients treated for cocaine dependence across three modalities included in the national Drug Abuse Treatment Outcome Studies (DATOS). **Main Finding: "The strong after-treatment self-help effect in the two residential and inpatient modalities suggests these programs can improve treatment outcomes by making referral to after-treatment self-help participation a standard practice and installing mechanisms to increase the likelihood of attendance at least twice weekly during the year after treatment."**

26. Fiorentine, R. (1999). After drug treatment: Are 12-step programs effective in maintaining abstinence? *American Journal of Drug and Alcohol Abuse*, 25(1), 93-116. 24-month longitudinal after-treatment study of 356 patients admitted to outpatient SUD treatment. **Conclusions: "Rather than a behavioral indicator of recovery motivation or a spurious relationship confounded by additional treatment, aftercare, or alumni activities that occur simultaneously with 12-step participation, the findings suggest that weekly or more frequent 12-step participation is associated with drug and alcohol abstinence. Less-than-weekly participation is not associated with favorable drug and alcohol use outcomes, and participation in 12-step programs seems to be equally useful in maintaining abstinence from both illicit drug and alcohol use. These findings point to the wisdom of a general policy that recommends weekly or more frequent participation in a 12-step program as a useful and inexpensive aftercare resource for many clients."** (P. 93)

27. Humphreys, K. (1999). Professional interventions that facilitate 12-step self-help group involvement. *Alcohol Research and Health*, 23, 93-98. Research review. **Conclusions: "Facilitating patients' involvement with 12-step self-help organizations, such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA), is often a goal of substance abuse treatment. Twelve-step-facilitation (TSF) interventions have been found to be more effective than comparison treatments in increasing patients' 12-step group involvement and in promoting abstinence."** (P. 93)

28. Humphreys, K., Mankowski, E. S., Moos, R. H., & Finney, J. W. (1999). Do enhanced friendship networks and active coping mediate the effect of self-help groups on substance Abuse? *Annals of Behavioral Medicine*, 21(1), 54-60. Study of the effects of self-help groups in a sample of 2,337 male veterans treated for SUD**. Main Finding: "The majority of participants became involved in self-help groups after inpatient treatment, and this involvement predicted reduced substance use at 1-year follow-up. Both enhanced friendship networks and increased active coping responses appeared to mediate these effects."**

29. Janowsky, D. S., Boone, A., Morter, S., & Howe, L. (1999). Personality and alcohol/substance-use disorder patient relapse and attendance at self-help group meetings. *Alcohol and Alcoholism*, 34(3), 359-69. One-month follow-up of patients admitted for SUD detoxification. **Main Finding: "High TPQ [Tridimensional Personality Questionnaire] Persistence scale scores and low Shyness with Strangers and Fear of Uncertainty subscale scores predicted attendance at self-help group meetings. High MBTI [Myers-Briggs Type Indicator] Extroversion and high MBTI Thinking scores also predicted attendance at self-help group meetings. When the Extroverted and Introverted types and the Thinking and Feeling types respectively were combined, as with abstinence, high scores predicted attendance at self-help group meetings."**

30. Winzelberg, A., & Humphreys, K. (1999). Should patients' religiosity influence clinicians' referral to 12-Step self-help groups? Evidence from a study of 3,018 male substance abuse patients. *Journal of Consulting & Clinical Psy*chology, 67(5), 790-794. Study examining degree to religiosity influenced referral and benefit from 12-step groups of 3,018 males treated for substance dependence. **Main Findings and Conclusion: "Individuals who engaged in fewer religious behaviors in the past year were referred to 12-step groups less frequently by clinicians. However, referrals to 12-step groups were effective at increasing meeting attendance, irrespective of patients' religious background, and all experienced significantly better substance abuse outcomes when they participated in 12-step groups. The viewpoint that less religious patients are unlikely to attend or benefit from 12-step groups may therefore be overstated."** (P. 790)

31. Bogenschutz, M. P., & Akin, S. J. (2000). 12-Step participation and attitudes toward 12-step meetings in dual diagnosis patients. *Alcoholism Treatment Quarterly*, 18(4), 31-45. A study of 12-Step attitudes of 81 patients with SUD and co-occurring severe mental illness. **Main Findings: "The results suggest that12-step programs may be a viable treatment option for many dual diagnosis patients. The difficulties that some dual diagnosis patients report experiencing at 12-step meetings may need to be addressed to maximize 12-step attendance and potential to benefit from 12-step programs."** (P. 43)

32. Ehrmin, J. T. (2000). Cultural implications of the 12-step approach in addictions treatment and recovery. *Journal of Addiction Nursing*, 12(1), 37-41. Interviews were conducted with 12 current or former African American female clients in SUD treatment and 18 female community informants. **Key Findings: "The women identified the 12-Step program as either as an overall caring [half of those interviewed] or noncaring [half of those interviewed] influence enabling them to successfully move through treatment and recovery."** (P. 38)

33. Fiorentine, R., & Hillhouse, M. P. (2000). Drug treatment and 12-step program participation: The additive effects of integrated recovery activities. *Journal of*

Substance Abuse Treatment, 18(1), 65-74. Follow-up study of 419 adults admitted to 25 outpatient SUD treatment programs in Los Angeles. **Major Findings: "Treatment participants with pretreatment 12-step involvement stayed in treatment longer, and were more likely to complete the 24-week program. Both pretreatment 12-step involvement and duration of participation in drug treatment are associated with subsequent 12-step involvement. Most importantly, there is an additive effect of these recovery activities in that those who participated concurrently in both drug treatment and 12-step programs had higher rates of abstinence than those who participated only in treatment or in 12-step programs."** (P. 65)

34. Fiorentine, 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(3), 367-397. Study of the effects of Twelve-Step ideology on participation in Twelve-Step programs and abstinence from drug use. **Main Findings: "…the acceptance of Twelve-Step ideology, particularly strong agreement with the need for frequent, lifelong attendance at Twelve-Step meetings, and the need to surrender to a "higher power" are significant predictors of weekly or more frequent attendance at Twelve-Step meetings independent from other potentially mediating variables. Twelve-Step ideology, specifically the notion that controlled or nonproblematic drug use is not possible, predicted abstinence independent from Twelve-Step participation and other potentially mediating variables."** (P. 367)

35. Kelly, J. F., Myers, M. G., & Brown, S. A. (2000). A multivariate process model of adolescent 12-Step attendance and substance use outcome following inpatient treatment. *Psychology of Addictive Behaviors*, 14(4), 376-389. 99 Adolescents admitted to inpatient SUD treatment were assessed at intake and at 3 and 6 month follow-up. **Main Findings: "Results revealed modest beneficial effects of 12-step attendance, which were mediated by motivation but not by coping or self-efficacy."** (P. 376)

36. Weiss, R. D., Griffin, M. L., Gallop, R., Luborsky, L., Siqueland, L., Frank, A., Onken, L. S., Daley, D. C., & Gastfriend, D. R. (2000). Predictors of self-help group attendance in cocaine dependent patients. *Journal of Studies on Alcohol*, 61(5), 714-719. Study of predictors of recovery mutual aid participation among 487 patients in a multicenter study randomly assigned to one of four psychosocial treatments for cocaine dependence. **Main Findings: "Approximately two thirds of the patients attended one or more self-help meetings during the 24-week period. Patients initially more likely to attend self-help groups frequently were those who were unemployed, had no religious preference, had more severe baseline drug use and reported treatment for prior substance-related problems. Patients with more severe baseline drug use and those who previously received treatment for substance-related problems were more likely to maintain frequent**

attendance throughout the study period. Only severity of base- line drug use predicted more frequent attendance during Month 6, although there was a trend in Month 6 favoring more frequent attendance by women." (P. 714)

37. Best, D. W., Harris, J. C., Gossop, M., Manning, V. C., Man, L. H., Marshall, J., & Strang, J. (2001). Are the Twelve Steps more acceptable to drug users than to drinkers? A comparison of experiences of and attitudes to Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) among 200 substance misusers attending inpatient detoxification. *European Addiction Research*, *7*(2), 69-77. 200 patients were interviewed-100 from alcohol treatment unit and 100 from drug treatment unit—to evaluate attitudes toward AA and NA. **Major finding: "the drug users (who were on average younger) reported more positive attitudes towards AA/NA, more willingness to attend during their inpatient treatment and greater intention to attend following completion of detoxification."** (p. 1)

38. Brown, B. S., O'Grady, K. E., Farrell, E., Flechner, I. S., & Nurco, D. N. (2001). Factors associated with the frequency of 12-Step attendance by drug abuse clients. American *Journal of Drug and Alcohol Abuse*, 27(1), 147-160. Comparison of high (30) and low (41) frequency 12-Step attenders of NA or AA. **"Key Finding: The findings suggest that 12-Step groups are more likely to be selected by clients with more severe histories of drug use and criminal activity, i.e., those most in need of the support to behavior change those groups provide."** (P. 147)

39. Brown, T. G., Seraganian, P., Tremblay, J., & Annis, H. (2001). Process and outcome changes with relapse prevention versus 12-Step aftercare programs for substance abusers. *Addiction*, 97, 677–689. Study comparing relapse prevention (RP) to 12-Step Facilitation aftercare (TSF). **Conclusion: "Carefully orchestrated RP and TSF aftercare programs yield process changes that are related positively to improved outcome."** (P. 677)

40. Hillhouse, M. P. & Fiorentine, R. (2001). 12-step program participation and effectiveness: Do gender and ethnic differences exist? *Journal of Drug Issues*, 31(3), 767-780. 356 participants in adult outpatient alcohol and drug treatment were followed for 24 months and rates of 12-Step to assess degree and effects of 12-Step participation. **Conclusion: "Contrary to reports that 12-Step is more appropriate for European-- American males, statistical analyses reveals that women and ethnic minorities are equally likely to attend 12-Step programs, and to recover in conjunction with such participation as European-American males. Although 12Step may not appeal to all seeking to cease alcohol and drug use, the clinical implications for treatment providers and other addiction specialists points to the benefits of integrating 12-Step components into traditional treatment programs and recommending 12-Step participation for clients of all gender and ethnic groups."** (P. 767)

41. Humphreys, K., & Moos, R. (2001). Can encouraging substance abuse patients to participate in self-help groups reduce demand for health care? A quasi-experimental study. *Alcoholism: Clinical and Experimental Research*, 25(5), 711-716. Comparison of 12-Ste-based and cognitive-behavioral-based (CB) treatment programs in clinical outcomes and post treatment costs. **Major Findings: "Compared with patients treated in CB programs, patients treated in 12-step programs had significantly greater involvement in self-help groups at follow-up. In contrast, patients treated in CB programs averaged almost twice as many outpatient continuing care visits after discharge as patients treated in 12-step treatment programs, and also received significantly more days of inpatient care….Professional treatment programs that emphasize self-help approaches increase their patients' reliance on cost-free self-help groups and thereby lower subsequent health care costs. Such programs therefore represent a cost-effective approach to promoting recovery from substance abuse."** (P. 711)

42. 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(4), 537-563. Survey of 3,018 patients one year after discharge from SUD treatment. **Main Findings: the majority of patients who received inpatient treatment for substance abuse attended 12-step self-help groups after discharge, read 12-step literature, talked with friends or sponsors in the groups, and incorporated steps into their daily lives. People who at intake had moreprior12-stepself-help group involvement, religious beliefs and behavior, belief in the disease model of addiction, education, and abstinence as a goal for treatment were more likely to be involved in 12-step groups 1 year later.** (PP. 555-556)

43. Moos, R., Schaefer, J., Andrassy, J. & Moos, B. (2001). Outpatient mental health care, self-help groups, and patients' one-year treatment outcomes. *Journal of Clinical Psychology*, 57(3), 273-287. One-year follow-up study of 2,376 patients treated for a substance use disorder. **Main Findings: "The duration of outpatient mental health care and the level of self-help involvement are independently associated with less substance use and more positive social functioning."**

44. Brown, T. G., Seraganian, P., Tremblay, J., & Annis, H. (2002). Process and outcome changes with relapse prevention versus 12-Step aftercare programs for substance abusers. *Addiction*, 97(6), 677-689. Adults in SUD treatment were randomly assigned to relapse prevention or 12-Setp Facilitation aftercare programs. **Main Finding: "Carefully orchestrated RP and TSF aftercare programs yield process changes that are related positively to improved outcome."** (P. 677)

45. Jordan, L. C., Davidson, W. S., Herman, S. E., Bootsmiller, B. (2002). Involvement in 12-Step programs among persons with dual diagnoses. *Psychiatric Services*, 55(7), 894-896. Study of the rates of AA and NA attendance among 351 persons with dual diagnoses treated in a hospital setting. **Main Findings: "Ten months after hospitalization, the study participants demonstrated rates of AA or NA attendance that were similar to those of persons who were diagnosed as having substance use disorders without severe mental illness. However, patients with schizophrenia or schizoaffective disorders reported significantly fewer days of AA or NA meeting attendance."** (P. 894)

46. Kelly, J. F., Myers, M. G., & Brown, S. A. (2002). Do adolescents affiliate with 12-step groups? A multivariate process model of effects. *Journal of Studies on Alcohol*, 63(3), 293-304. Adolescent inpatients (N = 99) were assessed during treatment and 3 and 6 months post discharge. **Main Findings: "Results revealed modest beneficial effects of 12-step attendance, which were mediated by motivation but not by coping or self-efficacy."** (P. 293)

47. Majer, J. M., Jason, L. A., Ferrari, J. R., Venable, L., & Olson, B. D. (2002). Social support and self-efficacy for abstinence: is peer identification an issue? *Journal of Substance Abuse Treatment*, 23, 209–215. Survey of abstinence social support among 100 Oxford House residents in the U.S. **Major Finding: "The vast majority of Oxford House residents in the present study (97%) reported they attended 12-step meetings, yet it is not known how much abstinence social support from regular attendees at these meetings may or may not have influenced participants' abstinence social support, whether directly or indirectly. Additionally, residents who reported having a 12-step homegroup had significantly higher abstinence self-efficacy scores, but not higher abstinence social support scores, than those residents who did not report having a homegroup. This finding implies that members of 12-step groups may not necessarily have to identify with members in their abstinence social support networks in order to benefit by them."** (P. 213)

48. Fiorentine, R., & Hillhouse, M. P. (2003). Why extensive participation in treatment and Twelve-Step programs is associated with the cessation of addictive behaviors, *Journal of Addictive Diseases*, 22(1), 35-55. 360 of 417 patients within 25 outpatient addiction treatment programs interviewed at eight-month follow-up to assess outcomes and mechanisms of 12-Step (NA and AA) participation. **Conclusion: [To achieve optimal recovery outcomes], "the client should be strongly encouraged to participate in counseling frequently (3 or more times per week), to remain in outpatient treatment for at least six months, and to attend Twelve-step meetings on at least a weekly basis during and after treatment."** (p. 50)

49. Kelly, J. F. (2003). Self-help for substance-use disorders: History, effectiveness, knowledge gaps, and research opportunities. *Clinical Psychology Review*, 23,

639-663. Literature review and related discussion. **Conclusions: "Regarding subpopulations, current evidence suggests non- or less-religious individuals benefit as much from self-help groups as more religious individuals and women become as involved and benefit as much as men. However, participation in, and effects from, traditional self-help groups for dually diagnosed patients may be moderated by type of psychiatric comorbidity. Some youth appear to benefit, but remain largely unstudied. Dropout and nonattendance rates are high, despite clinical recommendations to attend."** (P. 639).

50. Kelly, J. F., McKellar, J. D., & Moos, R. (2003). Major depression in patients with substance use disorders: Relationship to 12-step self-help involvement and substance use outcomes. *Addiction*, 98, 499–508. Assessment of 110 of 2051 male patients at admission for SUD treatment who presented with co-morbid depression and at 1 and two years post-discharge. **Main Findings: "SUD-MDD patients were initially less socially involved in and derived progressively less benefit from 12-Step groups over time compared to the SUD-only group. However, substance use outcomes did not differ by diagnostic cohort. In contrast, despite using substantially more professional outpatient services, the SUD-MDD cohort continued to suffer significant levels of depression."** (P. 499)

51. 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(3), 241-250. Assessment of the prevalence, predictors, and treatment-related factors affecting dropout in the first year following treatment of 2,518 male patients who had attended 12-step groups either in the 90 days prior to, or during, treatment. **Major finding: "At 1-year follow-up 40% had dropped out. A number of baseline factors predicted dropout. Importantly, patients who initiated 12-step behaviors during treatment were less likely to drop out. Further findings suggest patients at highest risk for dropout may be at lower risk if treated in a more supportive environment."** (P. 241) The odds of continued substance use were three times greater for those who had dropped out compared to those who attended 12-Step meeting to the one year follow-up.

52. Kissin, W., McLeod, C. & McKay, J. (2003). The longitudinal relationship between self-help group attendance and course of recovery. *Evaluation and Program Planning*, 26(3), 311-323. 30-month follow-up study of relationship between self-help (SH) participation and alcohol and other drug (AOD) use in a large adult treatment population. **Main Findings and Conclusion: "Continuous SH participation was associated with lowest AOD use at followup, while non-attendance was linked to highest use, even after controlling for length of formal treatment and participants' perceived severity of their AOD problem. Results suggest that both SH and formal substance abuse treatment are independently associated with reduced AOD use, and SH participation is**

associated with treatment. This study supports the importance of SH attendance and of formal treatment by individuals with AOD abuse disorders." (P. 311)

53. Kurtz, L. F., & Fisher, M. (2003a). Participation in community life by AA and NA members. *Contemporary Drug Problems*, 30(4), 875-904. 17 AA members and 15 NA members with at least two years of recovery were interviewed to assess their degree of community involvement beyond 12-Step group participation. **Major Finding: "In response to those who find 12-step fellowships disempowering and individualistic, our findings suggest that it is possible for 12-step participation to engender a sense of empowerment, commitment to community life, and concern for others."**

54. Kurtz, L. F., & Fisher, M. (2003b). Twelve-Step recovery and community service. *Health & Social Work*, 28(2), 137-145. 33 AA and NA members were interviewed to assess degree of community involvement. **Main Finding: "Most of our 12-step participants believed that fellowship participation encouraged rather than discouraged community involvement."** P. 144.

55. Laudet, A. (2003). Attitudes and beliefs about 12-step groups among addiction treatment clients and clinicians: Toward identifying obstacles to participation. Substance Use & Misuse, 38(14). 2017-2047. Survey of clients (N = 101) and clinicians (N = 102) in outpatient treatment programs in New York City to examine 12-step related attitudes and to identify potential obstacles to participation. **Main Findings: "Both staff and clients viewed 12SG [12-Step groups] as a helpful recovery resource. Major obstacles to participation centered on motivation and readiness for change and on perceived need for help, rather than on aspects of the 12-step program often cited as points of resistance (e.g., religious aspect and emphasis on powerlessness)."** (P. 2017)

56. Laudet, A. B., Magura, S., Vogel, H. S., & Knight, E. L. (2003). Participation in 12-step-based fellowships among dually-diagnosed persons. *Alcoholism Treatment Quarterly*, 21(2), 19-39. Study following 277 members of a dual-focus 12-step-based fellowship over one year to asses level of participation in both specialized dual focus and traditional 12=Step groups among dually-diagnosed persons. **Main Findings: "Findings indicate that dually-diagnosed persons do engage in both types of fellowships; patterns of engagement differed across fellowships, suggesting different comfort levels. Both types of fellowships were used to deal with addiction. Greater difficulty with substance use at baseline was associated with greater likelihood of attending 12SG at follow-up."** (P. 19)

57. Morgenstern, J., Bux, D. A., Jr., Labouvie, E., Morgan, T., Blanchard, K. A., & Muench, F. (2003). Examining mechanisms of action in 12-Step community outpatient treatment. *Drug and Alcohol Dependence*, 72(3), 237-247. A six-

month follow-up study of 252 patients admitted to community-based SUD treatment. **Major finding: "Results indicate that, in this community-based program, self-help affiliation increased as a function of exposure to 12-Step oriented treatment programming, and significantly predicted better outcome among patients with high levels of problem severity."** (P. 237)

58. Hayes, S. C., Wilson, K. G., Gifford, E. V., et al. (2004) A preliminary trial of twelve-step facilitation and acceptance and commitment therapy with polysubstance-abusing methadone-maintained opiate addicts. *Behavior Therapy,* 35(4), 677–688. Study comparing methadone maintenance alone to methadone maintenance in combination with 16 weeks of either Intensive Twelve-Step Facilitation (ITSF) or Acceptance and Commitment Therapy (ACT) with polysubstance-abusing opiate addicts who were continuing to use drugs while on methadone maintenance. **Main Findings and Conclusion: "Results showed that the addition of ACT was associated with lower objectively assessed opiate and total drug use during follow-up than methadone maintenance alone, and lower subjective measures of total drug use at followup….ITSF reduced objective measures of total drug use during follow-up but not in the intent-to-treat analyses. Most measures of adjustment and psychological distress improved in all conditions, but there was no evidence of differential improvement across conditions in these areas. Both ACT and ITSF merit further exploration as a means of reducing severe drug abuse."**

59. Humphreys, K., Wing, S., McCarty, D., Chappel, J., Galant, L., Haberle, B.,…Weiss, R. (2004). Self-help organizations for alcohol and drug problems: Toward evidence-based practice and policy. *Journal of Substance Abuse Treatment*, 26(3), 151-8. **Conclusion: "This expert consensus statement reviews evidence on the effectiveness of drug and alcohol self-help groups and presents potential implications for clinicians, treatment program managers and policymakers. Because longitudinal studies associate self-help group involvement with reduced substance use, improved psychosocial functioning, and lessened health care costs, there are humane and practical reasons to develop self-help group supportive policies. Policies described here that could be implemented by clinicians and program managers include making greater use of empirically-validated self-help group referral methods in both specialty and non-specialty treatment settings and developing a menu of locally available self-help group options that are responsive to client's needs, preferences, and cultural background."** (P. 151)

60. Zemore, S. E., Kaskutas, L. A., & Ammon, L. N. (2004). In 12-step groups, helping helps the helper. *Addiction*, 99(8), 1015-1023. 279 alcohol- and/or drug-dependent individuals treated in one of 4 day treatment programs were assessed for relationship of helping activities to recovery outcomes. **Main Findings: "Helping and 12-step involvement emerged as important and related**

predictors of treatment outcomes. In the general sample, total abstinence at follow-up was strongly and positively predicted by 12-step involvement at followup, but not by helping during treatment; still, helping positively predicted subsequent 12-step involvement." (P. 1015)

61. Antonis, R., & Katerina, F. (2005). An initial imprinting of the self-help groups of Narcotics Anonymous and Alcoholics Anonymous in Greece: The demographic facts. *International Journal of Self Help and Self Care*, 3(3/4), 193-212. **Key NA Findings: "Of the 60 individuals [NA members] who replied to the questionnaire, 70% were men and 30% women. The average age was 31.5 years, specifically 46.7% belong to the age group 21-29; 40% belong to the age group 30-40, and the rest (41 years or older), 13.3%."**

62. Day, E., Gaston, R. L., Furlong, E., Murali, V., Copello, A. (2005). United Kingdom substance misuse treatment workers' attitudes toward 12-step self-help groups. *Journal of Substance Abuse Treatment*, 29 (2005) 321–327. Survey of 346 UK addiction treatment workers regarding 12-Step groups. **Major Finding: "This survey suggests that although staff working in drug and alcohol treatment services in the United Kingdom feel satisfied with their levels of knowledge about 12-step treatment and the AA/NA fellowship, they rarely recommend their clients to make use of these services. Their overall attitudes toward the 12-step process are at best ambivalent, and more than half actively disagree with half of the 12 steps themselves."** (P. 325)

63. Kelly, J. F., Myers, M. G., & Brown, S. A. (2005). The effects of age composition of 12-Step groups on adolescent 12-Step participation and substance use outcome. *Journal of Child & Adolescent Substance Abuse*, 15(1), 63-72. Assessment of 74 adolescents treated for SUD at admission and at 3- and 6-month follow-up. **"Main Findings: Greater age similarity was found to positively influence attendance rates and the perceived importance of attendance, and was marginally related to increased step-work and less substance use. These preliminary findings suggest locating and directing youth to meetings where other youth are present may improve 12-step attendance, involvement, and substance use outcomes."** (PP. 63-64)

64. Laudet, A. & White, W. (2005). An exploratory investigation of the association between clinicians' attitudes toward twelve-step groups and referral rates. *Alcoholism Treatment Quarterly*, 23(1), 31-45. 100 clinicians working in outpatient SUD treatment programs in New York City were surveyed regarding attitudes and related referral practices with 12-Step groups. **Main Finding: "Participants held highly positive views of 12-step groups in terms of helpfulness to recovery, but a large percentage endorsed items describing potential points of resistance to 12-step groups, in particular the emphasis such groups place on spirituality and powerlessness. More positive attitudes were associated with greater rates of referral, while resistance to**

the concepts of spirituality/powerlessness was associated with lower rates of referral." (P. 31)

65. Tonigan, J. S., & Toscova, R. (2005). 12-step migration: A comparison of member characteristics and practices. *Alcoholism: Clinical and Experimental Research*, 29(5, Supplement), 385. (Abstract). Study of 99 AA members to ascertain the degree of simultaneous participation in AA and other 12-Step programs. **Main Findings: "Twenty-nine percent of the sample reported attending at least one non-AA 12-step meeting in the 90-days prior to the interview, with a mean number of non-AA 12-step meetings of 15.1 (SD = 21.16)…. Findings indicated that attendees of multiple 12-step programs were no more likely than non-migrators to report increased engagement in prescribed mutual-help practices."**

66. Weiss, R. D., Griffin, M., Gallop, R. J., Najavits, L. M., Arlene, F., Crits-Christoph, P., Thase, M. E., Blaine, J., Gastfriend, D. R., & Luborsky, L. (2005). The effect of 12-Step self-help group attendance and participation on drug use outcomes among cocaine-dependent patients. *Drug and Alcohol Dependence*, 77(2), 177-184. Study of the effects of recovery mutual aid participation (AA, NA, CA) on the clinical outcomes of 487 cocaine-dependent outpatients. Main Findings**: "Twelve-step group attendance did not predict subsequent drug use. However, active 12-step participation in a given month predicted less cocaine use in the next month. Moreover, patients who increased their 12-step participation during the first 3 months of treatment had significantly less cocaine use and lower ASI Drug Use Composite scores in the subsequent 3 months. Finally, Individual Drug Counseling, based on a 12-step model, and increasing levels of 12-step participation each offered discrete benefits."** (P. 177)

67. Witbrodt, J., & Kaskutas, L. A. (2005). Does diagnosis matter? Differential effects of 12-step participation and social networks on abstinence. *American Journal of Drug and Alcohol Abuse*, 31(4), 685-707. Study of abstinence predictors for 302 patients diagnosed with alcohol dependence, drug dependence, or both alcohol and drug dependence and followed up at 6 and 12 months. **Main Findings: "…the number of 12-step meetings attended and number of prescribed 12-step activities engaged in similarly predicted abstinence for alcoholics, drug addicts, and those dependent on both alcohol and drugs. However, specific activities were associated with abstinence differentially by dependence disorder. While many activities differentiated abstinence for drug addicts and those dependent on both alcohol and drugs, for alcoholics only two Alcoholics Anonymous (AA) activities distinguished abstinence (having a sponsor and doing service). Key predictors of abstinence (CHAID) varied by follow-up and dependence disorder, except for doing service in AA and/or Narcotics Anonymous, which was the only specific 12-step activity that was a best predictor of abstinence in all three categories one year following treatment….For all clients, doing service is**

especially important at the longer 12-month posttreatment timeframe." (P. 685)

68. Aromin, R. A. Jr., Galanter, M., Solhkhah, R., Dermatis, H. & Bunt, G. (2006): Preference for spirituality and Twelve-Step-oriented approaches among adolescents in a residential therapeutic community, *Journal of Addictive Diseases*, 25:2, 89-96. Survey of 181 adolescents in a residential therapeutic community (TC) regarding their attitudes toward spirituality and 12-Step aspects of treatment. **Key Findings: "...a subset of adolescents strongly endorsed both spirituality and Twelve-Step-oriented approaches being featured more in TC treatment….One-fourth of the adolescents indicated no interest in the program providing spirituality and Twelve-Step-oriented interventions. As there are individual differences in level of spiritual development, careful screening of clients needs to be conducted taking into account spiritual needs, beliefs and prior Twelve-Step experiences."** (P. 94)

69. Fenster, J. (2006). Characteristics of clinicians likely to refer clients to 12-Step programs versus a diversity of post-treatment options. *Drug and Alcohol Dependence*, 83(3), 238-246. **Main Findings and Conclusion: "A large percentage of clinicians lacked knowledge about the effectiveness of all alternatives to 12-Step programs with the exception of CBT. Clinicians in the 12-Step subgroup were more likely than those in the Diversity subgroup to be unfamiliar with alternatives to 12-Step programs and to believe less strongly in the effectiveness of CBT and PSY….Findings suggest that clinicians could benefit from information and training on assessing and referring clients to various options for continuing care."** (P. 238)

70. Johnson, J. E., Finney, J. W., & Moos, R. H. (2006). End-of-treatment outcomes in cognitive-behavioral treatment and 12-step substance use treatment programs: Do they differ and do they predict 1-year outcomes? *Journal of Substance Abuse Treatment*, 31(1), 41-50. Study of 1,873 male veterans seeking SUD treatment at five CB-oriented and five 12-step-oriented VA inpatient/residential SUD programs. **Main Findings: "Patterns of change in proximal outcomes were similar across the two program types. After discharge, attendance at 12-step groups, but not outpatient treatment, was associated with greater maintenance on most proximal outcomes. Only a few proximal outcomes at discharge were associated with 1-year substance use; most 1-year proximal outcomes were associated with 1-year substance use. Having a sponsor, reading 12-step materials, attending 12-step meetings, and having an abstinence goal appeared to mediate the greater effects of 12-step programs (relative to CB programs) on abstinence."**

71. Laudet, A., Magura, S., Vogel, H., & Knight, E. (2000b). Support, mutual aid and recovery from dual diagnosis. *Community Mental Health Journal*, 36(5), 457-476.

Study of 310 people with co-occurring psychiatric and SUDs on role of mutual id participation on recovery outcomes. **Key Finding: "Participation in mutual aid was indirectly associated with recovery through perceived levels of support. The association between mutual aid and recovery held for dual-recovery groups but not for traditional, single-focus self-help groups."** (P. 457)

72. Laudet, A, Morgen, K. & White, W. (2006). The role of social supports, spirituality, religiousness, life meaning and affiliation with 12-step fellowships in quality of life satisfaction among individuals in recovery from alcohol and drug use. *Alcoholism Treatment Quarterly*, 24(102), 33-73. 353 people in recovery in New York City were interviewed to assess role of 12-Step participation on aspects of quality of life. **Main Findings: "Findings supported our hypothesis that social supports, spirituality, life meaning, religiousness and 12-step affiliation buffer stress significantly and enhance quality of life among recovering persons."** (P. 46)

73. Timko, C., DeBenedetti, A., & Billow, R. (2006). Intensive referral to 12-step self-help groups and 6-month substance use disorder outcomes. *Addiction*, 101(5), 678-688. doi: 10.1111/j.1360-0443.2006.01391.x 345 patients admitted to outpatient SUD treatment were randomly assigned to standard referral or an intensified referral to AA or NA meetings with 6-month followup assessment. **Conclusion: Inrtensive referral to 12-Step self-help during treatment is important to facilitate group involvement and enhance substance use outcomes, and may increase the liklihood that patients will continue to improve even after professional treatment has ended."** (P. 686)

74. Timko, C., Billow, R., & DeBenedetti, A. (2006). Determinants of 12-step group affiliation and moderators of the affiliation-abstinence relationship*. Drug & Alcohol Dependence*, 83(2), 111-21. Study examining characteristics of 345 SUD outpatients that were associated with more 12-step group attendance and involvement, Steps worked, and acceptance of 12-step philosophy at a 6-month follow-up. **Main Finding: "More 12-step meeting attendance and involvement were related to abstinence at 6 months. Associations of attendance with abstinence were stronger among patients who were younger, white, less-educated, unstably employed, less religious, and less interpersonally skilled."** (P. 111)

75. Vederhus, J. K. & Kristensen, O. (2006). High effectiveness of self-help programs after drug addiction therapy. *BMC Psychiatry*, 6: 35. Study of 59 patients treated for alcohol dependency and 55 patietns treated for multiple drug dependency to ascertain role of AA and NA participation in post-treatment recovery outcomes. **"Main Findings: 38% still participated in self-help programs two years after treatment. Among the regular participants, 81% had been abstinent over the previous 6 months, compared with only 26% of the non-participants."** (P. 1)

76. Atkins, Jr., R. G., & Hawdon, J. E. (2007). Religiosity and participation in mutual-aid support groups for addiction. *Journal of Substance Abuse Treatment*, 33(3), 321-331. Population survey of 924 self-identified people in recovery. **Key Findings: „Survey data indicate that active involvement in support groups significantly improves one's chances of remaining clean and sober, regardless of the group in which one participates. Respondents whose individual beliefs better matched those of their primary support groups showed greater levels of group participation, resulting in better outcomes as measured by increased number of days clean and sober. Religious respondents were more likely to participate in 12-step groups [AA and NA] and Women for Sobriety. Nonreligious respondents were significantly less likely to participate in 12-step groups. Religiosity had little impact on SMART Recovery participation but actually decreased participation in Secular Organizations for Sobriety.“** (P. 321)

77. Carrico, A. W., Gifford, E. V., Moos, R. H. (2007). Spirituality/religiosity promotes acceptance-based responding and 12-step involvement. *Drug and Alcohol Dependence*, 89, 66-73. Study of 3698 substance-dependent male veterans assessed at baseline, discharge, 1-year follow-up, and 2-year follow-up exploring whether acceptance-based responding (ABR) - awareness or acknowledgement of internal experiences that allows one to consider and perform potentially adaptive responses - accounted for the effect of S/R on 12-step self-help group involvement 2 years after a treatment episode. **Main Finding: S/R promotes the use of post-treatment self-regulation skills that, in turn, directly contribute to ongoing 12-step self-help group involvement.** (P. 66).

78. Cloud. R. N., Rowan, N., Wulff, D. & Golder, S. (2008) Posttreatment 12-Step program affiliation and dropout: Theoretical model and qualitative exploration, *Journal of Social Work Practice in the Addictions*, 7(4), 49-74. Qualitative study of AA/NA affiliation of 14 individuals recruited from six SUD treatment programs. **Main Findings: AA/NA affiliation is linked tor resolituion of ambivalce related to: “(1)congruence of personal beliefs with the TS program values, beliefs, and normative practices; (2) reactions to the TS program social environment; and (3) the time demands of regular attendance with other competing and perceived personal needs.“**

79. Donovan, D. M., & Wells, E. A. (2007). ‘Tweaking 12-Step’: the potential role of 12-Step self-help group involvement in methamphetamine recovery. *Addiction*, 102(Suppl 1), 121-129. Review of the research literature on outcomes associated with 12-Step meeting attendance (CA, NA, MA, AA) and involvement in 12-Step activities among people with stimulant use disorders. **Conclusions: Although involvement in 12-Step fellowship improves outcome, many individuals do not engage on their own in 12-Step activities, and there are high rates of dropout from such groups. There are a number of evidence-based therapies available to assist clinicians in facilitating 12-Step involvement;**

however, these have not been used with methamphetamine abusers.... More actively integrating 12-Step approaches into the treatment process may provide low- or no-cost options for methamphetamine abusers and increase the capacity for providing treatment.“ (P. 121)

80. Flora, K., & Raftopoulos, A. (2007). First description of Narcotics Anonymous and Alcoholics Anonymous members in Greece: Prior treatment history and opinions about professionals. Contemporary Drug Problems, 34(1), 163-170. Study of 22 AA members and 60 NA members in Greece. **Main Finding: “...there are needs which the groups of AA and NA do not cover. Critical attitudes towards professionals show the need for information and inter-communication between the interested sides.“** (P. 163)

81. Gossop, M., Stewart, D., & Marsden, J. (2007). 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. Interviews were conducted with 142 individuals admitted to addiction treatment in the UK with follow-up interviews conducted at 1, 2 and 4-5 years**. Conclusion: “…the improved alcohol outcomes of NA / AA attenders suggests that the effectiveness of existing treatment services may be improved by initiatives that lead to increased involvement and engagement with such groups….It is acknowledged that NA / AA will not appeal to, or be a feasible option for all patients.”** (P. 124)

82. Humphreys, K., & Moos, R.H. (2007). Encouraging posttreatment self-help group involvement to reduce demand for continuing care services: Two year clinical and utilization outcomes. *Alcoholism: Clinical and Experimental Research*, 31(1), 64-68. A 2-year quasi-experimental analysis of matched samples of male substance-dependent patients who were treated in either 12-step-based (n=887 patients) or cognitive-behavioral (CB, n=887 patients) treatment programs. **Main Findings and Conclusions: “…the only difference in clinical outcomes was a substantially higher abstinence rate among patients treated in 12-step (49.5%) versus CB (37.0%) programs. Twelve-step treatment patients had 50 to 100% higher scores on indices of 12-step self-help group involvement than did patients from CB programs….Promoting self-help group involvement appears to improve posttreatment outcomes while reducing the costs of continuing care. Actively promoting self-help group involvement may therefore be a useful clinical practice for helping addicted patients recover in a time of constrained fiscal resources.” (P. 64).**

83. Kelly, J. F. & Myers, M. G. (2007). Adolescents’ participation in Alcoholics Anonymous and Narcotics Anonymous: Review, implications and future directions. *Journal of Psychoactive Drugs*, 39(3), 259-269. Review of existing research on youth participation in AA and NA. **Conclusion: “…freely available**

AA and NA networks could provide a cost-effective long-term therapeutic adjunct to professional SUD approaches for youth."

84. Laudet, A., Stanick, V., & Sands, B. (2007). The effect of onsite 12-step meetings on post-treatment outcomes among polysubstance-dependent outpatient clients. *Evaluation Review*, 31(6), 613-646. Study of 219 polysubstance-dependent clients to assess the role of presence/absence of onsite 12-step meetings during treatment on post-treatment outcomes. **Main Finding: "Onsite 12-step enhanced 12-step attendance, especially during treatment, and predicted continuous abstinence for the post treatment year. Holding 12-step meetings onsite is a low-cost strategy that programs should consider to foster post-treatment remission maintenance."** (P. 613)

85. Stahler, G. J., Mazzella, S., Mennis, J., Chakravorty, S., Rengert, G., & Spiga, R. (2007). The effect of individual, program, and neighborhood variables on continuity of treatment among dually diagnosed individuals. *Drug & Alcohol Depend*ence, 87(1), 54-62. Review of the medical charts of 271 inpatients diagnosed with co-morbid mental health and substance-use disorders discharged to various outpatient treatment programs in Philadelphia. **Key NA-related Finding: "…a high density of narcotics anonymous (NA) and/or alcoholics anonymous (AA) meetings within the neighborhood…reduced the likelihood of attending outpatient treatment."** (P. 54)

86. Timko, C., & DeBenedetti, A. (2007). A randomized controlled trial of intensive referral to 12-step selfhelp groups: one-year outcomes. *Drug and Alcohol Dependence*, 90(2-3), 270-279. Study of standard versus intensive referral to 12-Step mutual aid groups of 345 patients in outpatient SUD treatment. **Main Findings and Conclusions: "Compared with patients who received standard referral, patients who received intensive referral were more likely to attend and be involved with 12-step groups during both the first and second six-month follow-up periods, and improved more on alcohol and drug use outcomes over the year….Twelve-step involvement mediated the association between referral condition and alcohol and drug outcomes, and was associated with better outcomes above and beyond group attendance….To most benefit patients, SUD treatment providers should focus 12-step referral procedures on encouraging broad 12-step group involvement, such as reading 12-step literature, doing service at meetings, and gaining self-identity as a SHG member."** (p. 270)

87. Zemore, S. E. (2007). A role for spiritual change in the benefits of 12-Step involvement. *Alcoholism: Clinical & Experimental Research*, 31(10 Suppl), 76s-79s. 733 patients in day hospital or residential SUD treatment programs in California were studied for degree of 12-Step involvement and role of spirituality in recovery. **Main Findings: "Increases in 12-step involvement from baseline to follow-up predicted higher odds of total abstinence at follow-up, and this relationship was partially explained by increases in spirituality."** (P. 76s).

88. Davey-Rothwell, M.A., Kuramoto, J., & Latkin, C. A. (2008) Social networks, norms, and 12-Step group participation. *The American Journal of Drug and Alcohol Abuse*, 34: 185–193. Study of 931members of an HIV prevention network were studied based on the intensity of their recovery mutual aid participation. **Key Findings: Participants who reported that most or all of their drug partners attended 12-step groups were over ten times more likely to be frequent attenders compared to individuals who did not go to Narcotics Anonymous (NA). Conclusion: Interventions are needed to promote participation in 12-step programs.** (P. 191.)

89. Donovan, D. M., & Floyd, A. S. (2008). Facilitating involvement in Twelve-Step programs. In M. Galanter, & L.A. Kaskutas (Eds.), *Recent Developments in Alcoholism, Research on Alcoholics Anonymous and Spirituality in Addiction Recovery*, 18(2) (pp. 303-320). Research literature review. **Conclusions: "Twelve-step programs represent a readily available resource for individuals with substance use disorders. These programs have demonstrated considerable effectiveness in helping substance abusers achieve and maintain abstinence and improve their overall psychosocial functioning and recovery….it is possible to increase twelve-step involvement and that doing so results in reduced substance use."** (P. 303)

90. Kelly, J. F., Brown, S. A., Abrantes, A., Kahler, C. W., & Myers, M. (2008). Social recovery model: An 8-year investigation of adolescent 12-step group involvement following inpatient treatment. *Alcoholism: Clinical and Experimental Research*, 32(8), 1468-1478. **Main Findings: "AA/NA attendance was common and intensive early post-treatment, but declined sharply and steadily over the 8-year period. Patients with greater addiction severity and those who believed they could not use substances in moderation were more likely to attend. Despite declining attendance, the effects related to AA/NA remained significant and consistent. Greater early participation was associated with better long-term outcomes."** (P. 1468)

91. Kelly, J. F.; Myers, M.G.; & Rodolico, J. (2008). What do adolescents exposed to Alcoholics Anonymous think about 12-step groups? *Substance Abuse*, 29(2), 53-62. 451 adolescents in SUD treatment were surveyed regarding their views towards AA and NA. **Main Finding and Conclusions: "The aspects of AA/NA youth liked best were general group dynamic processes related to universality, support, and instillation of hope. The most common reason for discontinuing was boredom/lack of fit. General group-therapeutic, and not 12-step-specific, factors are most valued by youth during early stages of recovery and/or degree of AA/NA exposure. Many youth discontinue due to a perceived lack of fit, suggesting a mismatch between some youth and aspects of AA/NA."** (p. 53)

92. Kelly, J. F. & Yeterian, J. D. (2008). Mutual help groups. In W. T. O'Donohue & N. A. Cummings (Eds.), Evidence-based adjunctive treatments (p. 61–105). **Review of research on AA, NA, and alternative recovery support groups. Conclusion: "…freely available MHG organizations may play an increasingly important role as their availability grows and evidence of their effectiveness continues to emerge. We encourage health care providers to inform their patients about these organizations, to help them give them a fair try, and to monitor patients' responses."** (P. 101)

93. Kelly, J. F. Yeterian J., & Myers, M. G. (2008). Treatment staff referrals, participation expectations, and perceived benefit to adolescent involvement in 12-Step groups. *Alcoholism Treatment Quarterly*, 26(4), 10. 114 clinical staff of five adolescent SUD treatment programs were surveyed anonymously about referral practices and other beliefs about 12-step groups. **Main Findings: "Staff rated AA/NA participation as very important and helpful to adolescent recovery and referral rates were uniformly high."**

94. Laudet, A. B. & White, W. L. (2008) Recovery capital as prospective predictor of sustained recovery, life satisfaction and stress among former poly-substance users. *Substance Use and Misuse*, 43(1), 27-54. 312 inner-city residents in addiction (heroin and cocaine) recovery in New York City were assessed at baseline and one-year follow-up. **Main Findings: "Findings highlight the importance of 12-step involvement, (low) stress, and spirituality as factors that enhance the likelihood of positive recovery outcomes and of global functioning….Findings underline the premise that recovery is a dynamic process. Different factors promote positive outcome at successive stages of the recovery process."** (P. 35)

95. Matheson, J. L. & McCollum, E. E. (2008). Using metaphors to explore the experiences of powerlessness among women in 12-Step recovery. *Substance Use & Misuse*, 43:1027–1044. Interviews examining the experiences of powerlessness among 13 women of varied racial, ethnic, and socioeconomic backgrounds, ages 21 to 60, who had an average of 9.5 years of recovery. **Main Finding: "For those who feel that all of their life is out of control, powerlessness appears to be an easier concept to embrace. For the others, however, it can be a barrier….The longer they were in recovery, the more their metaphors for powerlessness changed into images that were empowering and relieving."** (P. 1039)

96. Passetti, L. L., & White, W. L. (2008). Recovery support meetings for youths: Considerations when referring young people to 12-step and alternative groups. Journal of Groups in Addiction and Recovery, 2(2-4), 97-121. Research review. **Conclusion: "In order to assist young people in this area, professionals may want to engage in the following activities: 1) help young people structure their time before and after meetings and monitor their interactions with group members to minimize situations that may lead to**

relapse; 2) become familiar with group customs and languages in order to prepare youths for meetings, make appropriate referrals, and clear any misunderstandings; 3) research the characteristics of local meetings, including age composition of members, so that referrals can be tailored based on youths' needs, preferences, and cultural backgrounds; 4) investigate the variety of recovery support groups offered in a given area to provide youths with a menu of options; 5) recognize that some youths may need to try a diversity of meetings before finding one (or a combination) that feels comfortable; 6) interact with recovery support group service structures and develop a list of reliable group members to connect youths to the recovering community; and 7) implement assertive rather than passive referral strategies, including connecting youths to sober social activities sponsored by support groups, helping youths identify and approach sponsors, screening sponsors for appropriateness, monitoring attendance, and monitoring reactions to experiences and program concepts."

97. Schneider, R., Burnette, M, & Timko, C. (2008). History of physical or sexual abuse and participation in 12-Step self-help groups. *The American Journal of Drug and Alcohol Abuse*, 34, 617–625. Comparison of patients with (122) and without (143) a history of physical or sexual abuse admitted to SUD treatment at the Veterans Administration. **Main Findings: "physical or sexual abuse was associated with more attendance at and involvement in12-step groups. Participation in12-step groups predicted abstinence at one year, regardless of abuse history.**" (P. 617)

98. Zemore, S. E., & Kaskutas, L. A. (2008). 12-Step involvement and peer helping in day hospital and residential programs. *Substance Use & Misuse*, 43(12-13), 1882-1903. Study of peer helping and 12-step involvement among participants receiving SUD treatment at day hospital (503) and residential (230) programs and relationships between both variables and outcomes. **Main Findings: "Both peer helping and 12-step involvement predicted higher odds of sobriety across follow-ups; helping showed an indirect effect on sobriety via 12-step involvement. Results contribute to the 12-step facilitation literature; confirm prior results regarding benefits of mutual aid."** (P. 1882).

99. Book, S. W., Thomas, S. E., Dempsey, J. P., & Randall, P. K. (2009). Social anxiety impacts willingness to participate in addiction treatment. *Addictive Behaviors*, 34, 474-476. **Main Finding: "Controlling for depression and worry, social anxiety was a unique predictor of endorsement that shyness interfered with willingness to talk to a therapist, speak up in group therapy, attend AA/NA, and ask somebody to be a sponsor. Socially anxious substance abusers were 4-8 times more likely to endorse that shyness interfered with addiction treatment activities."**

100. Chi, F. W., Kaskutas, L. A., Sterling, S., Campbell, C. I., & Weisner, C. (2009). Twelve-Step affiliation and 3-year substance use outcomes among adolescents: social support and religious service attendance as potential mediators. *Addiction*, 104(6), 927-939. 3-year follow-up of 357 adolescents admitted to SUD treatment in California. **Key Findings: "At 3 years, 68 adolescents (19%) reported attending any 12-Step meetings, and 49 (14%) reported involvement in at least one of seven 12-Step activities, in the previous 6 months….12-Step activity involvement was associated significantly with 30-day alcohol and drug abstinence. The findings suggest the importance of 12-Step affiliation in maintaining long-term recovery and help to understand the mechanism through which it works among adolescents."** (p. 927)

101. McKellar, J. D., Harris, A. H., & Moos, R. H. (2009). Patients' abstinence status affects the benefits of 12-step self-help group participation on substance use disorder outcomes. *Drug & Alcohol Dependence*, 99(1-3), 115-22. 1683 SUD patients from 88 community residential facilities were assessed at baseline and 1- and 4-year follow-ups. **Major Findings: "Patients abstinent at 1-year post-treatment who attended 12-step self-help group meetings were no more likely to be abstinent at 4 years than abstinent patients who did not attend. However, for patients not abstinent at 1 year, a significant improvement in abstinence rates at 4 years emerged for those who attended 12-step self-help groups compared to those who did not (42% vs. 28.9%). A similar pattern emerged for SUD problems. There were no benefits from 12-step self-help group attendance for patients abstinent at 1 year, but non-abstinent patients who attended 12-step self-help groups had significantly fewer problems at 4 years."** (P. 115)

102. Davey-Rothwell , M. A., Kuramoto , J., & Latkin, C. A. (2009). Social networks, norms, and 12-Step group participation. *American Journal of Drug and Alcohol Abuse*, 34(2), 185-193. Study of social networks of a sample of active drug users. **Major Findings and Conclusion: "Participants who reported that most or all of their drug partners attended 12-step groups were over ten times more likely to be frequent attenders compared to individuals who did not go to Narcotics Anonymous (NA). While social network structure of number of cocaine and heroin users and number of members in treatment was associated with frequent attendance, there was no association among individuals who infrequently went to a 12-step program. Individuals who are trying to control their drug use should be encouraged to affiliate with others in recovery or attending a 12-step program."** (P. 185)

103. Vederhus, J.-K., Kristensen, O., Laudet, A., & Clausen, T. (2009). Attitudes towards 12-step groups and referral practices in a 12-step naive treatment culture: a survey of addiction professionals in Norway. *BioMed Central Health Services Research*, 9(1), 147. doi: 10.1186/1472-6963-9-147 Survey of 291 addition professionals in Norway regarding 12-Step attitudes and referral

practices. **Main Findings: "Participants had moderately positive attitude scores towards TSGs** [AA and NA]**, but referral to these groups among Norwegian addiction professionals was low, as was the level of knowledge about TSGs."** (P. 1)

104. Gaston, R. S., Best, D., Day, E., & White, W. (2010). Perceptions of 12-Step interventions among UK substance-misuse patients attending residential inpatient treatment in a UK treatment setting. *Journal of Groups in Addiction & Recovery*, 5, 306–323. Survey of 125 patients admitted to SUD treatment in the UK. **Major Findings: Two-thirds (69.4%) reported prior attendance at 12-step meetings, but current levels of affiliation were low and significant barriers to 12-step meeting attendance were identified. Barriers to participation include the perceived religious components of 12-step meetings, prior negative experiencesin12-step meetings, failure to identify with group members, and difficulties simultaneously participating in both 12-step meetings and structured treatment."** (P. 226)

105. Kelly, J. F., Dow, S. J., Yeterian, J. D. & Kahler, C. W. (2010), Can 12-step group participation strengthen and extend the benefits of adolescent addiction treatment" A prospective analysis. *Drug and Alcohol Dependence*, 110(1-2), 117-25. A prospective study of 127 adolescent admitted to outpatient SUD treatment and role of 12-step involvement in treatment outcomes assessed at intake, 3 months, and 6 months. **Conclusion: "Attendance (at AA and/or NA groups) appears to strengthen and extend the benefits of typical community outpatient treatment."** (P. 117)

106. Majer, J. M., Droege, J. R., & Jason, L. A. (2010). A categorical assessment of 12-step involvement in relation to recovery resources. *Journal of Groups in Addiction & Recovery*, 5(2), 155-167. Survey of 100 members of Alcoholics Anonymous and Narcotics Anonymous residing in recovery homes regarding 12-Step activities. **Major finding: Participants who were actively involved in 12-step activities [e.g., sponsor, home group, service activity, socializing outside of meetings] reported significantly higher levels of recovery resources compared with those who were less involved…Findings suggest that categorical involvement in 12-step activities equip recovering alcoholics/addicts with resources for their ongoing recovery.** (P. 155)

107. Sussman, S. (2010). A review of Alcoholics Anonymous/ Narcotics Anonymous programs for teens. *Evaluation and the Health Professions*, 33(1), 26-55. A review of 19 studies of the clinical outcomes of use of an AA/NA model in the treatment of adolescents with a substance use disorder. **Conclusion: "AA/ NA participation is a valuable modality of substance abuse treatment for teens and that much can be done to increase teen participation, though more research is needed."** (p. 26-27)

108. Timko, C., Sutkowi, A. & Moos, R. (2010). Patients with dual diagnoses or substance use disorders only: 12-Step group participation and 1-year outcomes. *Substance Use & Misuse*, 45(4), 613-627. Comparison of outpatients with substance use and psychiatric (N = 199) or only substance use (N = 146) disorders on baseline and one-year symptoms (93%% follow-up), and treatment and 12-step group participation over the span of one year. **Main Findings: "At follow-up, dual diagnosis patients had more severe symptoms, despite comparable treatment. The groups were comparable on 12-step participation, which was associated with better outcomes. However, associations of participation with better outcomes were weaker for dual diagnosis patients."** (P. 419)

109. Vederhus, J. K., Laudet, A., Kristensen, O., & Clausen, T. (2010). Obstacles to 12-step group participation as seen by addiction professionals: Comparing Norway to the United States. *Journal of Substance Abuse Treatment*, 39(3), 210-217. Survey of addiction professionals in the U.S. and Norway to compare attitudes toward 12-Step groups. **Main Findings and Conclusion: "The Norwegian professionals (n = 291) considered the religious aspects of TSGs a considerable obstacle to participation, whereas the U.S. providers (n = 100) did not. Treatment providers unfamiliar with the 12-step philosophy need to be better informed of TSGs' "higher power" concept to educate patients and maximize the utilization of TSGs."** (P. 210)

110. Kelly, J. F., Dow, S. J. Yeterian, J. D., & Myers, M. (2011). How safe are adolescents at AA and NA meetings? A prospective investigation with outpatient youth. *Journal of Substance Abuse Treatment*, 40(4), 419-428. 128 youth involved in outpatient SUD treatment were assessed at 3, 6 and 12 months regarding perceived safety of AA and NA. **Major Finding: "Findings here suggest exposure to 12-step meetings is common among outpatient youth, that outpatient youth report feeling safe at these groups overall, but that some report negative experiences….it would seem that as a function of total 12-step meeting exposure, this [negative event] may be quite rare**." (P. 424)

111. Kelly, J. F., Pagano, M. E., Stout, R. L., & Johnson, S. M. (2011). Influence of religiosity on 12-Step participation and treatment response among substance-dependent adolescents. *Journal of Studies on Alcohol and Drugs*, 72, 1000-1011. 195 adolescents in residential SUD treatment surveyed at intake and discharge. **Conclusion: Our findings extend the evidence for the protective effects of religious behaviors to a better treatment response among adolescents and provide some preliminary support for the 12-step proposition that adopting 12-step practices, most notably a focus on helping others in recovery, may lead to better substance-related outcomes during treatment." (p. 1008) "Youth with low or no lifetime religious practices may assimilate less well into 12-step–oriented treatment and may**

need additional 12-step facilitation, or a different approach, to enhance treatment response." (P. 1000)

112. Krentzman, A. R., Moore, B. C., Robison, E. A. R., Kelly, J., Kurtz, E., Laudet, A., White, W. L. & Zemore, S. (2011). How Alcoholics Anonymous and Narcotics Anonymous work: Cross-disciplinary perspectives. *Alcoholism Treatment Quarterly*, 29(1), 75-84. **Summary of Conference Papers**.

113. Majer, J. M., Jason, L. A., Ferrari, J. R., & Miller, S. A. (2011). 12-step involvement among a U.S. sample of Oxford House residents. *Journal of Substance Abuse Treatment*, 41(1), 37-44. 897 adult residents of U.S. Oxford Houses were surveyed at baseline, 4, 8, and 12 months regarding relationships between 12-step activities and abstinence outcomes. **Major findings: "Findings suggest that categorical involvement in a number of 12-step activities equip persons with substance use disorders with resources for ongoing recovery."** (p. 37)

114. Orwat, J., Samet, J. H., Tompkins, C. P., Cheng, D. M., Dentato, M. P., & Saitz, R. (2011). Factors associated with attendance in 12-step groups (Alcoholics Anonymous/Narcotics Anonymous) among adults with alcohol problems living with HIV/AIDS. *Drug and Alcohol Dependence*, 113(2-3), 165-171. Survey of mutual aid participation among 400 adults living with HIV/AIDS and alcohol problems. **Main Findings: "At study entry, subjects were 75% male, 12% met diagnostic criteria for alcohol dependence, 43% had drug dependence and 56% reported attending one or more AA/NA meetings (past 6 months)."** P. 165.

115. Raftopoulos, A., & Flora, K. (2011). Substance use related behavior of the members of Narcotics Anonymous and Alcoholics Anonymous in Greece. *Journal of Psychoactive Drugs*, 43(3), 238-245. **Profile of AA and NA members in Greece without data regarding duration of abstinence.**

116. Chi, F. W., Campbell, C. I., Sterling, S. & Weisner, C. (2012). Twelve-Step attendance trajectories over 7 years among adolescents entering substance use treatment in an integrated health plan. *Addiction*, 107, 933-942. Study of 391 adolescents entering SUD treatment between 2000 and 2002 who completed at least one follow-up interview in year one, and at least one during years three to seven, after treatment entry. **Conclusion: "Robust connection with twelve-step groups appears to be associated with better long-term outcomes among adolescents with substance use disorders."** (P. 933)

117. Enayat, J., Javahmard, Gh. H, & Mammagani, J. (2012). The comparison of attention biases to opiates in substance dependent and treated clients of therapeutic clinics and Narcotics Anonymous members. *Research on Addiction*, 6(23), 27-37. **Study of attention bias in tempting incentives related to opium materials in addicted people who were referred to the rehabilitation offices,**

addiction treatment clinic, rebirthing centers and Narcotics Anonymous of East Azerbaijan compared to a non-addicted control group. NA data was not reported separately.

118. Kelly, J. F. & Yeterian, J. D. (2012). Empirical awakening: The new science on mutual help and implications for cost containment under health care reform. *Substance Abuse*, 33, 85-91. Research overviews on 12-Step effectiveness. Conclusion: **"…professionally delivered interventions designed to facilitate the use of AA and NA ("Twelve-Step Facilitation" [TSF]) are now "empirically supported treatments" as defined by US federal agencies and the American Psychological Association. Under the auspices of health care reform, a rational societal response to the prodigious health and social burden posed by alcohol and other drug misuse should encompass the implementation of empirically based strategies (e.g., TSF) in order to maximize the use of ubiquitous mutual-help recovery resources."** (P. 85)

119. Mundt, M. P., Pathasarathy, S., Chi, F. W., Sterling, S., & Campbell, C. I. (2012). 12-step participation reduces medical costs among adolescents with a history of alcohol and other drug treatment. *Drug and Alcohol Dependence*, 126(1-2), 124-30. Study of changes in seven-year health care use and costs by changes in 12-step participation of 403 adolescents following SUD treatment admission. **Main Findings: "Each additional 12-step meeting attended was associated with an incremental medical cost reduction of 4.7% during seven-year follow-up. The medical cost offset was largely due to reductions in hospital inpatient days, psychiatric visits, and AOD treatment costs."** (P. 124)

120. Kelly, J. F., & Urbanoski, K. (2012). Youth recovery contexts: The incremental effects of 12-Step attendance and involvement on adolescent outpatient outcomes. *Alcoholism Clinical & Experimental Research*, 36(7), 1219–1229. Adolescent outpatients (N=127; M age 16.7; 75% male; 87% White) in a naturalistic study of treatment effectiveness were assessed at intake and 3, 6, and 12 months later using standardized assessments. **Conclusions: "The benefits of 12-step participation observed among adult samples extend to adolescent outpatients. Community 12-step fellowships appear to provide a useful sobriety-supportive social context for youth seeking recovery, but evidence-based youth-specific 12-step facilitation strategies are needed to enhance outpatient attendance rates."** (P. 1219)

121. Manning, V., Best, D., Faulkner, N., Titherington, E., Morinan, A., Keaney, F., ... , & Strang, J. (2012). Does active referral by a doctor or 12-Step peer improve 12-Step meeting attendance? Results from a pilot randomised control trial. *Drug and Alcohol Dependence*, 126(1), 131-137. An RCT investigating the impact on 151 patients of active referral to SHG [self-help groups], delivered by doctors or 12-Step peers during inpatient treatment. **Conclusion: "Attendance**

at 12-Step SHGs is associated with greater rates of abstinence and active referral, especially by 12-Step peers, increases 12-Step SHG attendance rates. However, improved clinical outcomes among attendees might not occur until stronger recovery peer support networks are established. These results show promise for the benefit of incorporating Twelve Step Facilitation into U.K. treatment settings." (P. 131)

122. Witbrodt, J., Mertens, J., Kaskutas, L. A., Bond, J., Chi, F., & Weisner, C. (2012). Do 12-step meeting trajectories over 9 years predict abstinence? *Journal of Substance Abuse Treatment*, 43(1), 30-43. Study of 1825 SUD patients with 5 waves of data collection over none years to ascertain role of 12-step attendance (AA, NA, CA) on abstinence outcomes. Main Findings and Conclusion: **"The high class reported the highest attendance and abstention. The descending class reported high baseline alcohol severity, long treatment episodes, and high initial attendance and abstinence; but by year-5 their attendance and abstinence dropped. The early-drop class, which started with high attendance and abstinence but with low problem severity, reported no attendance after year 1. The rising class, with fairly high alcohol and psychiatric severity throughout, reported initially low attendance, followed by increasing attendance paralleling their abstention. Last, the low and no classes, which reported low problem-severity and very low/no attendance, had the lowest abstention. Female gender and high alcohol severity predicted attendance all years. Consistent with a sustained benefit for 12-step exposure, abstinence patterns aligned much like attendance profiles."** (P. 30)

123. Worley, M. J., Tate, S. R., & Brown, S. A. (2012). Mediational relations between 12-Step attendance, depression and substance use in patients with comorbid substance dependence and major depression. *Addiction*, 107(11), 1974-1983. Study of the effects of 12-Step participation on 209 veterans diagnosed with alcohol, stimulant, or marijuana dependence and substance-independent major depressive disorder. **Conclusion: "For patients with substance dependence and MDD, attendance at 12-step meetings is associated with mental health benefits that extend beyond substance use, and reduced depression could be a key mechanism whereby 12-step meetings reduce future drinking in this population."** (P. 1974)

124. Bergman, B. G., Greene, M. C., Hoeppner, B. B., Slaymaker, V. & Kelly, J. F. (2013). Psychiatric comorbidity and 12-Step participation: A longitudinal investigation of treated young adults. *Alcoholism: Clinical and Experimental Research*, 38(2), p. 501-510. Prospective naturalistic study of 296 young adults treated for a SUD and assessed at intake and 3, 6, and 12 months posttreatment on 12-step attendance/active involvement and percent of days abstinent. **Conclusion: "Despite concerns regarding the clinical utility of 12-step MHOs for DD patients, findings indicate that DD young adults participate and benefit as much as SUD-only patients, and may benefit more from high**

levels of active involvement, particularly having a 12-step sponsor." (P. 501)

125. Buckingham, S. A., Frings, D., & Albery, I. P. (2013). Group membership and social identity in addiction recovery. *Psychology of Addictive Behaviors*, 27(4), p. 1132-1140. Study of role of identity transformation in preventing relapse among AA and NA members and former smokers. **Main Finding: "Although exploratory, these results suggest that developing a social identity as a "recovering addict" or an "ex-smoker" and subsequently highlighting the difference between such identities may be a useful strategy for reducing relapse among people with problems associated with addictive behaviors."** (P. 1132)

126. Chi, F. W., Sterling, S., Campbell, C. I., Weisner, C. (2013). 12-step participation and outcomes over 7 years among adolescent substance use patients with and without psychiatric comorbidity. *Substance Abuse*, 34(1), 33–42. Study of the associations between 12-step participation and outcomes over 7 years among 419 adolescent substance use patients with and without psychiatric comorbidities. **Major Findings and Conclusions: "Although level of participation decreased over time for both groups, comorbid adolescents participated in 12-step groups at comparable or higher levels across time points. Results from mixed-effects logistic regression models indicated that for both groups, 12-step participation was associated with both alcohol and drug abstinence at follow-ups, increasing the likelihood of either by at least 3 times. Findings highlight the potential benefits of 12-step participation in maintaining long-term recovery for adolescents with and without psychiatric disorders."** (P. 33)

127. Donovan, D. M., Daley, D. C., Brigham, G. S., Hodgkins, C. C., Perl, H. I., Garrett, S. B., ... , & Kelly, T. M. (2013). Stimulant abuser groups to engage in 12-Step: A multisite trial in the National Institute on Drug Abuse Clinical Trials Network. *Journal of substance abuse treatment*, 44(1), 103-114. Study of the effectiveness of an 8-week combined group plus individual 12-step facilitative intervention on stimulant drug use and 12-step meeting attendance and service with 3 and 6-month follow-up of 471 patients entering treatment for a stimulant use disorder. **Major Findings: "Compared with TAU [treatment as usual], STAGE-12 participants had significantly greater odds of self-reported stimulant abstinence during the active 8-week treatment phase; however, among those who had not achieved abstinence during this period, STAGE-12 participants had more days of use. STAGE-12 participants had lower Addiction Severity Index Drug Composite scores at and a significant reduction from baseline to the 3-month FU [followup], attended 12-step meetings on a greater number of days during the early phase of active treatment, engaged in more other types of 12-step activities throughout the active treatment phase and the entire FU period, and had more days of self-reported service at meetings from mid-treatment through the 6-month FU."**

128. Kelly, J. F., Stout, R. L. & Slaymaker, V. (2013). Emerging adults' treatment options in relation to 12-step mutual help attendance and active involvement. *Drug Alcohol Dependence*, 129(1-2), 151-157. 303 emerging adults in SUD treatment were assessed at intake, 3, 6, and 12 months on 12-step attendance and involvement and treatment outcomes. **Main Findings and Conclusion: "The percentage attending 12-step meetings prior to treatment (36%) rose sharply at 3 months (89%), was maintained at 6 months (82%), but declined at 12 months (76%). [The study] found beneficial effects for attendance, but stronger effects, which increased over time, for active involvement. Several active 12-step involvement indices were associated individually with outcome benefits. Ubiquitous 12-step organizations may provide a supportive recovery context for this high-risk population at a developmental stage where non-using/sober peers are at a premium."** (P. 151)

129. Labbe. A. K., Greene, C., Bergman, B. G., Hoeppner, B., & Kelly, J. F. (2013). The importance of age composition of 12-step meetings as a moderating factor in the relation between young adults' 12-step participation and abstinence, *Drug and Alcohol Dependence*, 133(2), 541-547. 302 young adults enrolled in residential treatment effectiveness were assessed at intake, and 3, 6, and 12 months later on 12-step attendance, age composition of attended 12-step groups, and treatment outcome. **Main Finding and Conclusions: "A similar age composition was helpful early post-treatment among low 12-step attendees, but became detrimental over time. Treatment and other referral agencies might enhance the likelihood of successful remission and recovery among young adults by locating and initially linking such individuals to age appropriate groups. Once engaged, however, it may be prudent to encourage gradual integration into the broader mixed-age range of 12-step meetings, wherein it is possible that older members may provide the depth and length of sober experience needed to carry young adults forward into long-term recovery."** (P. 541)

130. Majer, J. M., Jason, L. A., Aase, D. M., Droege, J. R., & Ferrari, J. R. (2013). Categorical 12-Step involvement and continuous abstinence at two-years. *Journal of Substance Abuse Treatment*, 44(1), 46–51. A longitudinal analysis of 12-step involvement among a U.S. sample of patients exiting treatment for substance dependence. **Main Findings: "Findings suggest that categorical involvement in a set of 12-step activities and communal-living settings such as Oxford Houses are independent factors associated with continuous abstinence from both alcohol and illicit drugs among substance dependent persons."** (P. 46)

131. Worley, M. J., Tate, S. R., McQuaid, J. R., Granholm, E. L., & Brown, S. A. (2013). 12-Step affiliation and attendance following treatment for comorbid substance dependence and depression: A latent growth curve mediation model.

Substance Abuse, 34(1), 43-50. Study of the relationship between rates of change in 12-step involvement and substance use, utilizing posttreatment follow-up data from a trial of group Twelve-Step Facilitation (TSF) and integrated cognitive-behavioral therapy (ICBT) for veterans with substance dependence and major depressive disorder. Main Findings: Although TSF patients were higher on 12-step affiliation and meeting attendance at end-of-treatment as compared with ICBT, they also experienced significantly greater reductions in these variables during the year following treatment, ending at similar levels as ICBT. Veterans in TSF also had significantly greater increases in drinking frequency during follow-up, and this group difference was mediated by their greater reductions in 12-step affiliation and meeting attendance. **Conclusions: Patients with comorbid depression appear to have difficulty sustaining high levels of 12-step involvement after the conclusion of formal 12-step interventions, which predicts poorer drinking outcomes over time. Modifications to TSF and other formal 12-step protocols or continued therapeutic contact may be necessary to sustain 12-step involvement and reduced drinking for patients with substance dependence and MDD."** (P. 43)

132. Zemore, S., Subbaraman, M., & Tonigan, J. S. (2013). Involvement in 12-step activities and treatment outcomes. *Substance Abuse*, 34(1), 60-69. 1-year follow-up study of 508 patients admitted to SUD treatment. **Main Findings: "12-Step meeting attendance and having a sponsor were the only strong and consistent predictors of abstinence across time points, though other activities (i.e., use of a home group, befriending members, service work, and reading the literature) were significant in some analyses."**

133. Flaherty, M. T., Kurtz, E., White, W. L. & Larson, A. (2014). An interpretive phenomenological analysis of secular, spiritual, and religious pathways of long-term addiction recovery. *Alcoholism Treatment Quarterly*, 32(4), 337 – 356. **Study of 6 subjects (one NA member) illustrating diverse pathways of long-term addiction recovery.**

134. Kelly. J. F., Stout, R. L., Greene, M. C., Slaymaker, V. (2014). Young adults, social networks, and addiction recovery: post treatment changes in social ties and their role as a mediator of 12-step participation. PloS One. 9(6):e100121. Study of the effects of 12-Step attendance on 302 Emerging adults admitted to SUD residential treatment and assessed at intake, 1, 3, 6, and 12 months. **Conclusions: Young adult 12-step participation confers recovery benefit; yet, while encouraging social network change, 12-step MHOs may be less able to provide social network change directly for young adults, perhaps because similar-aged peers are less common in MHOs[mutual aid organizations]."**

135. Labbe, A. K., Slaymaker, V., & Kelly, J.F. (2014). Toward enhancing 12-step facilitation among young people: a systematic qualitative investigation of young adults' 12-step experiences. Subst Abus., 35(4), 399–407. Study of the

self-reported experiences of 12-step participation, and reasons for non-attendance and discontinuation among young adults (18-24 yrs; N=302) following residential treatment. **Main Findings: "Young adults reported that cohesiveness, belonging, and instillation of hope were the most helpful aspects of attending 12-step groups; meeting structure and having to motivate oneself to attend meetings were the most common aspects young adults liked least; logistical barriers and low recovery motivation and interest were the most common reasons for discontinued attendance; and perceptions that one did not have a problem or needed treatment were cited most often as reasons for never attending."** (P. 399)

136. Wall, R., Sondhi, A. & Day, E. (2014). What influences referral to 12-Step mutual self-help groups by treatment professionals. *European Addiction Research*, 20:241-247. Survey of 12-Step attitudes of 92 clinicians working within two agencies in Birmingham (UK). **Main Findings: "Most (74%) had a positive attitude, and almost 80% referred at least some of their clients to TSGs. However, 30% had not referred any clients in the past month, and multivariate analysis showed that referral was associated with greater objective knowledge about TSGs when other factors were controlled for."** (P. 241)

137. Wells, E. A., Donovan, D. M., Daley, D. C., Doyle, S. R., Brigham, G., Garrett, S. B., Walker, R. (2014). Is level of exposure to a 12-step facilitation therapy associated with treatment outcome? *Journal of Substance Abuse Treatment*, 47(4), 265–274. 234 patients in treatment for a stimulant use disorder were assed at 30, 60, 90 and 120 days following randomization to treatment as usual or 12-Step Facilitation. **Main Findings: "Those achieving high exposure to STAGE-12 [12-Step Facilitation] compared with those with less exposure, demonstrated: (1) higher odds of self-reported abstinence from and lower rates of stimulant drug use; (2) lower probabilities of stimulant positive urines; (3) higher odds of self-reported abstinence from and lower rates of non-stimulant drug use; (4) lower odds of not attending and higher rates (days) of attending 12-Step self-help groups; (5) greater likelihood of reporting no drug problems; (6) a greater maximum number of days of self-reported duties at meetings; and (7) more types of other 12-Step activities engaged in during 30 day assessment windows. Most of these differences declined over time from early treatment to 180-day follow-up, but two (attending any versus no 12-Step meetings, and active involvement in 12-Step activities) were still significant by the last follow-up visit."**

138. White, W. L., Campbell, M. D., Spencer; R. A., Hoffman, H. A., Crissman, B. & DuPont, R. L. (2014). Participation in Narcotics Anonymous and Alcoholics Anonymous and abstinence outcomes of 322 methadone maintenance patients. *Journal of Groups in Addiction and Recovery*, 9(1), 14-30. Survey of 322 patients to test the relationship between continuous abstinence and 12-Step participation within the context of MMT. **Main Findings: "the present study confirms the**

existence of NA/AA-involved and NA/AA non-involved MMT patients who are continually abstinent from alcohol and illicit drugs; confirms a high rate of MMT patient participation in, and self-reported helpfulness of, 12-Step recovery support groups; raises important questions about the potential effects of MMT patient marginalization within 12-Step groups on abstinence outcomes; and suggests the potential existence of alternative, culturally indigenous recovery support structures that may help MMT patients maintain continuous abstinence."

139. Witbrodt, J., Bond, J., Chi, F. Weisner, C., & Mertens, J. (2014) Alcohol and drug treatment involvement, 12-step attendance and abstinence: 9-year cross-lagged analysis of adults in an integrated health plan. *Journal of Substance Abuse Treatment*, 46(4), 412–419.Study of adults (n=1945) seeking help for alcohol or drug use disorders from integrated healthcare organization outpatient treatment programs were followed at 1-, 5-, 7- and 9- years. **Main Findings and Conclusions: "…greater 12-step attendance during years 1 and 5 were casually related to past-30-day abstinence at years 5 and 7 respectfully, suggesting 12-step attendance leads to abstinence (but not vice versa) well into the post-treatment period….For outpatient clients, results reinforce the value of lengthier treatment duration and 12-step attendance in year 1."** (P. 412)

140. Hennessy, E. A., & Fisher, B. W. (2015). A meta-analysis exploring the relationship between 12-step attendance and adolescent substance use relapse. J Groups Addict Recover, 10(1):79–96. Literature review and meta-analysis of four studies. **Conclusion: "The overall mean effect indicated beneficial results for adolescents who attended 12-step programs posttreatment. These findings support the clinical recommendation that adolescents attend 12-step programs, yet the findings highlight the need for future research among this population that clearly documents variables related to recovery outcomes."** (P. 79)

141. Kendra, M. S., Weingardt, K. R., Cucciare, M. A., & Timko, C. (2015). Satisfaction with substance use treatment and 12-step groups predicts outcomes. *Addictive Behaviors*, 40, 27-32. Follow-up study of 345 patients entering the VA SUD treatment program. Main Findings: "More satisfaction with treatment and with 12-step groups at 6 months was associated with less alcohol use severity and more abstinence at 1 year. More treatment satisfaction was related to less subsequent medical severity, whereas more 12-step group satisfaction was related to less subsequent psychiatric severity. More 12-step group satisfaction was related to subsequent increases in 12-step group attendance and involvement."

142. Kingston, S., Knight, E., Williams, J., & Gordon, H. (2015). How do young adults view 12-Step programs? A qualitative study. *Journal of Addictive*

Diseases, 34(4), 311-322. Qualitative interviews with 26 young adult AA or NA participants. **Main Finding and Conclusion: "Most participants viewed 12-step programs favorably, reporting that the programs provided hope and emotional support. Participants who rejected the programs often refused to accept the concepts of powerlessness and a higher power. Many participants who rejected Alcoholics Anonymous and Narcotics Anonymous were unaware of some of the key tenets of the programs, suggesting that 12-step facilitation would benefit this population."** (P. 311)

143. Monico, L. B., Gryczynski, J., Mitchell, S. G., Schwartz, R. P., O'Grady, K. E., & Jaffe, J. H. (2015). Buprenorphine treatment and 12-step meeting attendance: Conflicts, compatibilities, and patient outcomes. *Journal of Substance Abuse Treatment*, 57, 89-95. Quantitative (n=300) and qualitative (n=20) study of African Americans in buprenorphine maintenance treatment. **Conclusions: "Twelve-step meeting attendance is associated with better outcomes for BMT patients over the first 6 months of treatment. However, there is no benefit to requiring meeting attendance as a condition of treatment, and clinicians should be aware of potential philosophical conflicts between 12-step and BMT approaches."** (P. 89)

144. Bekkering,G. E., Mariën, D., Parylo, O., & Hannes, K. (2016). The effectiveness of self-help groups for adolescent substance misuse: A systematic review. *Journal of Child & Adolescent Substance Abuse*, (25(3). Review of 12 studies. **Main Findings and Conclusions: "Results indicated that self-help group attendance appears to reduce alcohol and drug use, including abstinence. However, the lack of methodological rigor in these studies precludes definitive conclusions."**

145. Hatch-Maillette, M., Wells, E. A., Doyle, S. R., Brigham, G. S., Daley, D., DiCenzo, J., . . . Perl, H. I. (2016). Predictors of 12-step attendance and participation for individuals with stimulant use disorders. *Journal of Substance Abuse Treatment*, 68, 74–82. doi:10.1016/j.jsat.2016.06.007 Follow-up study of 471 patients admitted to 12-Step Facilitation treatment for cocaine or methamphetamine use disorders. **Key Findings: "Drug of choice was associated with differential days of Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) attendance among those who reported attending, and cocaine users reported more days of attending AA or NA at 1-, 3- and 6-month follow-ups than did methamphetamine users. Pre-randomization measures of perceived benefit of 12-step groups predicted 12-step attendance at 3- and 6-month follow-ups."**

146. Mendola, A., & Gibson, R. L. (2016). Addiction, 12-step programs, and evidentiary standards for ethically and clinically sound treatment recommendations: what should clinicians do? *AMA J Ethics,* 18(6), 646–655. **Conclusion: "The best known and most widely available approach to addiction is 12-step (TS) programs of recovery, a variety of MHG. These**

have been lauded as lifesaving by some and criticized by others. We argue that TS programs are an appropriate mode of help for those seeking to quit an addiction but should not be the only approach considered." (P. 646)

147. Kelly, J. F., Greene, M. C., & Bergman, B. G. (2017). Recovery benefits of the "therapeutic alliance" among 12-step mutual-help organization attendees and their sponsors. *Drug Alcohol Depend*., 162, 64–71. 302 young adults in residential SUD treatment were assessed at intake, and 3, 6, and 12 months after discharge on relationship between sponsorship and clinical outcomes. **Main Findings and Conclusion: "Approximately two-thirds of the sample (n = 208, 68.87%) reported having a sponsor at one or more follow-up time points. Both having sponsor contact and stronger sponsor alliance were significantly associated with greater 12-step participation and abstinence, on average, during follow-up. Interaction results revealed that more sponsor contact was associated with increasingly higher 12-step participation whereas stronger sponsor alliance was associated with increasingly greater abstinence. Similar to the professional-clinical realm, the "therapeutic alliance" among sponsees and their sponsors predicts better substance use outcomes and may help augment explanatory models estimating effects of MHOs in SUD recovery."** (P. 64)

148. Rubya, S., & Yarosh, S. (2017). Interpretations of online anonymity in Alcoholics Anonymous and Narcotics Anonymous. Proceedings of the ACM on Human-Computer Interaction, Article No.: 91 https://doi.org/10.1145/3134726. Online survey (N=285) and interviews with 26 participants of AA and NA members. **Main Finding: "…members were less likely to enact "unidentifiability" if they were more connected to the particular community and had more time in recovery."**

149. Wendt, D. C., Hallgren, K. A., Daley, D. C., & Donovan, D. M. (2017). Predictors and outcomes of Twelve-Step sponsorship of stimulant users: Secondary analyses of a multisite randomized clinical trial. *J Stud Alcohol Drugs*, 78(2), 287–295. 471 (59% women) patients in 10 SUD treatment programs were randomized into treatment as usual (TAU) or a 12-step facilitation (TSF) intervention: Stimulant Abuser Groups to Engage in 12-Step (STAGE-12). **Major Findings and Conclusions: "Participants were more likely to have a sponsor at the end of treatment and 3-month follow-up, with the STAGE-12 condition having higher sponsorship rates. Twelve-step meeting attendance and literature reading during the treatment period predicted having a sponsor at the end of treatment. Sponsorship at the end of treatment predicted a higher likelihood of abstinence from stimulant use and having no drug-related problems at follow-up. This study extends previous research on sponsorship, which has mostly focused on alcohol use disorders, by indicating that sponsorship is associated with positive outcomes for those seeking treatment from stimulant use disorders. It also suggests that sponsorship rates can be improved for those seeking**

treatment from stimulant use disorders through a short-term TSF intervention." (P. 287)

150. Kelly, J. F., Bergman, B. G., & Fallah-Sohy, N. (2018). Mechanisms of behavior change in 12-step approaches to recovery in young adults. *Current Addiction Reports*, 5(2): 134–145. doi: 10.1007/s40429-018-0203-1 Research Review: Conclusions: Results indicate that, compared to older adults, young adults are less likely to attend TSMHOs and attend less frequently, but derive similar benefit. The mechanisms, however, by which TSMHOs help, differ in nature and magnitude. Also, young adults appear to derive greater benefit initially from meetings attended by similar aged peers, but this benefit diminishes over time.

151. Bergman, B. G., Ashford, R., & Kelly, J. F. (2019). Attitudes toward opioid use disorder medications: Results from a U.S. national study of individuals who resolved a substance use problem. *Experimental and Clinical Psychopharmacology*, September, DOI: 10.1037/pha0000325 A National Recovery Study survey of U.S. adults who resolved a significant AOD problem (N = 1,946). Results showed that participants were equally likely to hold positive (21.4 [18.9-24.0]%) and negative agonist (23.8 [21.2-26.7]%) attitudes but significantly more likely to hold negative (30.3 [27.4-33.3]%) than positive antagonist attitudes (18.0 [15.9-20.4]%). Past 90-day non-12-step mutual-help attendance was a predictor of positive attitude toward agonist medication.

152. Day, E. Kirberg, S., & Metrebian, N. (2019). Affiliation to alcoholics anonymous or narcotics anonymous among patients attending an English specialist addiction service. *Drugs and Alcohol Today*, 19(4), 257-269. Survey of 200 consecutive admissions to addiction treatment unit in England. **Major Finding: "A minority of the sample had ever attended an AA meeting (31%, n= 59) or an NA meeting (41%, n=79), and only 14% (n=27) and 24% (n=45) had attended an AA or NA meeting respectively in the past year."**

153. Hay, K. R., Huhn, A. S., Tompkins, A., & Dunn, K. E. (2019). Recovery goals and long-term treatment preference in persons who engage in nonmedical opioid use. *Journal of Addiction Medicine*, 13(4), 300-305. 235 individuals who engage in nonmedical opioid use and met self-reported criteria for OUD were recruited online and participated in a cross-sectional survey on recovery goals and treatment perceptions. **Major Findings: "The most frequently endorsed treatments that participants would "try first" were physician visits (23.4%), one-on-one counseling (18.7%), and 12-step groups (13.2%), whereas the most frequently endorsed treatments for long-term recovery were one-on-one counseling (17.4%), residential treatment (16.7%), and buprenorphine (15.3%)."** (P. 300)

154. Lookatch, S. J., Schepens Wimberly, A., & Mckay, J. R. (2019). Effects of social support and 12-step involvement on recovery among people in continuing care for cocaine dependence. *Substance Use & Misuse*, 54(13), 2144-2155. Follow-up study of 489 adults treated for cocaine dependence in intensive outpatient treatment programs. **Main Finding: Greater AA/NA participation was associated with substance use goal and readiness to change, and less substance use.**

155. Harvey, L., Fan, W., Cano, M.A., Vaughan, E., Arbona, C., Essa, S., Sanchez, H., & de Dios, M. A. (2020). Psychosocial intervention utilization and substance abuse treatment outcomes in a multisite sample of individuals who use opioids. *Journal of Substance Abuse Treatment*, 112, 68-75. DOI:https://doi.org/10.1016/j.jsat.2020.01.016. Study of 570 individuals treated for opioid use disorder (OUD) within 8 U.S. treatment settings that compared effects of 12-Step participation on buprenorphine-naloxone versus extended-release naltrexone treatment for OUD. **Conclusion: "Hours of individual counseling and 12-Step participation significantly predicted abstinence at follow-up…Findings suggest that greater levels of individual therapy and 12-Step participation may be beneficial for individuals receiving medication treatment for OUD."**

156. Kelly, J. F., Humphreys, K., & Ferri, M. (2020). Alcoholics Anonymous and other 12-step programs for alcohol use disorder. *Cochrane Database of Systematic Reviews 2020*, Issue 3. Art. No.: CD012880. DOI: 10.1002/14651858.CD012880.pub2. Research review of 12-Step Facilitation Treatment. **Main Findings: "Manualized AA/TSF interventions usually produced higher rates of continuous abstinence than the other established treatments investigated. Non-manualized AA/TSF performed as well as other established treatments. AA/TSF may be superior to other treatments for increasing the percentage of days of abstinence, particularly in the longer-term. AA/TSF probably performs as well as other treatments for reducing the intensity of drinking (of alcohol). AA/TSF probably performs as well as other treatments for alcohol-related consequences and addiction severity. Four of the five economics studies found substantial cost-saving benefits for AA/TSF, which indicate that AA/TSF interventions probably reduce healthcare costs substantially."**

157. McClure, P. K., & Wilkinson, L. R. (2020). Attending substance abuse groups and identifying as spiritual but not religious. *Review of Religious Research*, March. DOI: 10.1007/s13644-020-00405-2. Population study of 1711 adult citizens in U.S. examining relationship between self-identification of "spiritual but not religious" and recovery mutual aid group affiliation. **Main Findings: "Individuals who have ever attended addiction recovery programs such as A.A. [and N.A.] are significantly more likely to identify as spiritual but not religious rather than identify as both religious and**

spiritual, and those who attend such programs more frequently have the greatest likelihood of identifying as spiritual but not religious."

158. Nash, A. (2020). The Twelve Steps and adolescent recovery: A concise review. *Substance Abuse Research and Treatment*, 14, 1-6. **Conclusion: "Though not the only model for post-treatment recovery support, research to date suggests that similar to adults, adolescents' involvement in 12-step groups predicts improved AOD use outcomes, and greater participation (ie, frequency, duration, and extent of involvement) predicts abstinence and SUD remission better than attendance alone. Moreover, 12-step participation reduces the associated healthcare costs for adolescents with SUD. Despite these benefits, in 2015 <2% of AA's and NA's total membership comprised people under 21 years old. Qualitative research has shed light on adolescents' reasons for resisting or engaging in 12-step practices and suggests strategies for promoting their involvement."** P. 4.