

# "WE DO RECOVER"

---

SCIENTIFIC STUDIES ON  
NARCOTICS ANONYMOUS



WILLIAM WHITE, M.A., MARC GALANTER, M.D.,  
KEITH HUMPHREYS, PH.D., AND JOHN KELLY, PH.D.

Narcotics Anonymous is a widely-known and well-attended addiction recovery mutual aid fellowship, but what does science really know about who attends and the effects of such participation? This brief pamphlet summarizes a report on 227 scientific studies of the effects of participation in Narcotics Anonymous. The review includes NA-specific studies and studies of 12-Step participation that included NA members. The full report with citation of all studies is available for free download at [williamwhitepapers.com](http://williamwhitepapers.com)

## When did formal scientific studies of NA begin?

Brief announcements of NA's existence as a potential addiction recovery support resource first appeared in medical and legal journals in the 1950s and early 1960s. Rigorous studies of NA began in the 1980s with a progressive increase in the quality of the research in the decades that followed.

## What is the international scope of NA research studies?

The majority of NA studies emanate from the Islamic Republic of Iran, the United States, the United Kingdom, and Australia, with a smaller number of studies conducted in Greece, India, Israel, and Norway. We anticipate the continued growth of NA studies as NA groups continue to expand internationally.

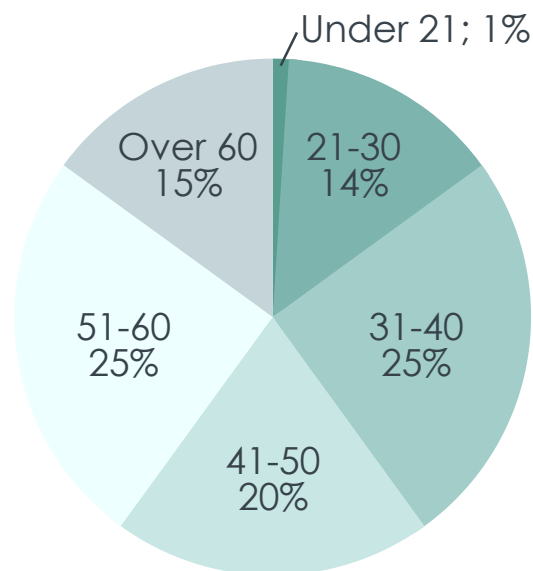


## What is the relative growth and availability of NA in the U.S. and Internationally?

NA has experienced substantial worldwide growth and adaptation across diverse cultural, political, and religious contexts. In 2020, there are 71,000 weekly NA meetings worldwide; it has more than doubled in the past 15 years.

## Who participates in NA?

Data from a 2018 survey portrays NA membership as relatively balanced by age (under 21: 1%; 21-30: 14%; 31-40: 25%; 41-50: 20%; 51-60: 25%; over 60: 15%) and gender (41% female) and ethnically diverse (30% people of color).



NA Participation Ages

## How common is 12-step co-attendance?

Only limited data are available on co-attendance across 12-Step groups. In the 2018 NA membership survey, 32% of members reported also attending meetings of another 12-Step fellowship. People seeking help for drug-related problems often use multiple sources of help.



## How do people get to NA?

Active drug users express generally positive attitudes toward NA and make initial contact with NA through a variety of influences, including contact with an NA member, referral by a treatment agency, or encouragement from family members. Factors such as personality, problem severity, religious orientation, and social network norms also influence the degree of attraction to NA.

## What are the major obstacles to NA participation?

Reported obstacles to NA participation include NA's expectation of alcohol abstinence; the perceived religious orientation of NA; aversion to the concepts of powerlessness, surrender, and higher power; social anxiety; and NA's position on the use of medications as a support for recovery from opioid use disorders.

## What is the retention/dropout rate of NA?

The dropout rate from NA is comparable to that in AA (approximately 40% at one-year follow-up) and is lower than the dropout rates of other interventions into alcohol and other drug problems (e.g., addiction treatment). NA retention rate is also superior to rates of adherence to prescribed management of other chronic health conditions. NA dropout rates call for professional encouragement of sustained mutual aid involvement, close monitoring of responses to mutual aid participation, and, when needed, re-linkage or exploration of recovery mutual aid group alternatives. Disengagement from mutual aid participation increases

the risk of addiction recurrence in the absence of alternative recovery support. This suggests the need for close monitoring and heightened levels of contact by addiction professionals and other helpers following disengagement from NA participation.

## What are the effects of NA participation on drug use and remission/recovery from substance use disorders?

NA studies, NA-inclusive 12-Step studies, and published reviews of 12-Step research (including Twelve-Step Facilitation treatment approaches) all report a strong association between NA participation and reduced drug use and increased rates of abstinence. The available evidence suggests the potential value of NA participation in recovery initiation and long-term recovery maintenance.

## What is the average duration of continuous recovery among NA members?

In a 2018 survey of 28,495 NA members conducted by NA World Services, members with a wide variety of past primary drug choices reported an average of 11.4 years of continuous abstinence, with 85% of members reporting five or more years of stable recovery. Within each community in which NA starts, the progressive increase in members sustaining stable recovery provides the foundation for a strong local NA recovery culture. That degree of organizational and personal stability now exists within many communities and provides role models in long-term recovery who can provide support to new members.

## What are the major risk factors for recurrence of drug use and addiction among NA members?

Studies to date identify four risk factors related to addiction recurrence among NA members: 1) unemployment, 2) changes in income, 3) decreased levels of NA participation, and 4) disengagement from NA. Research studies are needed that illuminate the patterns of drug use or drug abstinence across the long-term course of NA involvement and changes in such patterns preceding and following disengagement from NA.

## What are the broader effects of NA participation on health and quality of life outcomes?

NA participation is associated with improvements in global health and social functioning. Studies are limited and needed on the effects of NA participation on intimate relationships, family functioning, and changes in the person-community relationship.

## What factors related to NA participation predict substance use and quality of life outcomes?

Positive outcomes related to NA participation increase in tandem with intensity of participation and duration of participation. Broader involvement in NA activities and great frequency of these activities predict better outcomes than simply attending occasional NA meetings. Activities beyond meeting attendance include having a home group, active Step work, having a sponsor, sponsoring others, participating in the NA service structure, reading NA literature, and broader acts of helping others. Positive

addiction outcomes decline on the continuum from continuous NA participation (best outcomes), sporadic NA attendance, and no attendance (worst outcomes). Time is also a critical ingredient. While reduced drug use and initiation/stabilization of abstinence can occur early within NA participation, recovery of psychological health may take up to five years following cessation of drug use.

## Do such positive effects differ across demographic, cultural, and clinical characteristics?

Studies to date suggest that the positive effects of NA extend to diverse demographic and clinical populations and across diverse geographical and cultural contexts.

## Is NA participation associated with better recovery outcomes among adolescents?

Studies to date of 12-Step participation among adolescents enrolled in SUD treatment reveal variable, but generally positive, effects on substance use outcomes. Effects of 12-Step participation on reductions of drug use and increased rates of abstinence warrant referral of adolescents to these recovery management resources, particularly to meetings with higher youth representation. Youth should be presented with both 12-Step and alternative recovery mutual aid options, particularly if they are uncomfortable with the spiritual orientation of NA.

## Is NA safe for adolescents and other vulnerable populations?

Published studies on attraction to NA, obstacles to NA participation, or retention in NA have not identified safety concerns among those surveyed. We suggest that professionals referring to NA and other recovery mutual aid groups closely monitor the potential for harmful effects among youth referred. Mutual aid meetings vary in the presence of active ingredients known to promote recovery and vary in their degree of adherence to their own espoused principles and practices. Knowledge of the character of local meetings should inform referral of youth to mutual aid groups.

## Is NA safe for people with less religious or spiritual orientation? What is the role of spirituality in NA's program of recovery?

While NA's perceived religious orientation may be an obstacle to NA participation for some individuals, research to date suggests that recovery outcomes in NA are not contingent upon degree of religious orientation. At a practice level, professional helpers can explore this issue prior to potential referral, clarify the NA distinction between religion and spirituality, and provide orientation to NA Steps as well as secular interpretations of the Steps. It is also advisable to encourage those with less religious orientation to sample various NA meetings and as well as available secular alternatives.



## Is NA appropriate for people with co-occurring psychiatric illness?

Research findings differ on the equivalence of NA effectiveness among people with and without co-occurring SUD and other psychiatric disorders. The largest number of studies suggest that people with co-occurring disorders attend and benefit from NA at similar levels as those with only an SUD, but those with more severe forms of mental illness may require additional professional supports to maximize the positive effects of NA participation. When individuals in the latter group appear to experience a mismatch with NA, it is advisable to consider referral to a dual focus support group, e.g., Dual Diagnosis Anonymous, Double Trouble in Recovery.

### Research suggests that:

- Adolescents and other vulnerable populations
- Those with less religious orientation, and
- Those with co-occurring psychiatric illness

CAN benefit from participation in Narcotics Anonymous

## How does concurrent participation in addiction treatment and NA affect long-term recovery outcomes?

Research to date suggests that individuals who participate concurrently in both addiction treatment and 12-Step programs during and following treatment have higher rates of abstinence than those who participated only in treatment or only in 12-Step programs.

## Is NA appropriate for people in medication-assisted treatment?

NA involvement may be of potential benefit to people in medication-assisted treatment (MAT) as a complementary recovery support during MAT and as a source of post-MAT recovery support. Referral of such patients to NA should include: 1) preparatory orientation about NA policies on medication, 2) assertive linkage to medication-friendly NA meetings, 3) monitoring of MAT patient responses to NA meetings, and, 4) if and when needed, linkage to alternative recovery support resources such as Methadone Anonymous, Moms on Methadone, Medication-Assisted Recovery Support, or All Recoveries Anonymous.

## What mechanisms might help explain the positive changes people experience through NA participation?

Mechanisms of change within NA identified within existing studies include increased hope and confidence in one's recovery potential, increased motivation for abstinence, personal mentoring (sponsorship), social support, social network reconstruction, and restructuring of leisure time. Other noted mechanisms include transformations in personal identity and worldview, enhanced self-esteem, improved coping strategies, prestige acquisition from helping others, spiritual renewal, and decreases in stress, anxiety, depression, hostility, and shame.

The sheer number of mechanisms of change operating within NA identified within the above noted studies may account for its wide adaptability across cultural contexts and its viability across

diverse demographic and clinical populations. The NA program of recovery likely involves multiple mediators operating simultaneously with factors such as sex/gender, age, addiction severity, and cultural context influencing these mediators.

## Does NA lead to isolation from mainstream community life or greater civic involvement?

Studies that address this question have drawn three conclusions. First, 12-Step members are actively involved in community life. Second, 12-Step participation can elicit a sense of empowerment, a reconnection to community life, and increased concern for others. Finally, NA can serve as a connecting bridge between the drug culture and the mainstream community.



## What is the cost-effectiveness of NA participation?

The limited data available suggest that encouraging NA involvement leads to significant cost reductions in health care utilization. Additional social cost savings could accrue from decreased involvement in the criminal justice and child welfare systems as well as cost offsets related to increased employment.



## What are the attitudes toward NA among helping professionals and addiction treatment personnel and related referral practices?

Addiction treatment professionals and allied health professionals in the U.S. hold generally positive views toward NA, but NA attitudes and referral rates vary by country, by professional discipline, and the nature and degree of training in addiction treatment and related services. Attitudes toward NA evolve over time as NA groups become more accessible and predict greater levels of recovery stability among their members. Forty-five percent of NA members' first contact with NA is due to referral by a treatment facility or counseling agency.

## What can treatment centers do to increase patient participation in NA?

Hosting onsite 12-Step meetings during treatment increases 12-Step participation. Assertive linkage versus passive referral procedures and involving patients in wide variety of 12-Step activities (e.g., reading 12-Step literature, service work, etc.) is associated with increased participation and better long-term abstinence outcomes. Linking youth to meetings with higher youth representation enhances participation rates and recovery outcomes.

## What are the major limitations of published research on NA?

Limitations of NA research span the limited number of international studies on NA, the limited range of issues studied, and the historically weak but improving methodological rigor of NA and related

12-Step studies. Preliminary answers to key questions exist but require replication, with many questions remaining uninvestigated. The voluntary, anonymous, and highly decentralized organizational structure of NA poses innumerable research obstacles as NA practices may differ markedly across groups/meetings and across cultural contexts.

Conclusions related to the effects of NA participation are often based on "12-Step" studies that use mixed samples of NA and other 12-Step members without disaggregating and analyzing data by recovery fellowship. This practice casts NA as a clone of AA and defies the reality that NA constitutes a distinct program of recovery with its own unique history, culture, core ideas, language, and recovery support rituals. Most NA-related studies also utilize treatment samples, findings from which may not apply NA members without involvement in addiction treatment.

A final complication is the failure to adequately distinguish studies of NA as an addiction recovery mutual aid fellowship and studies of professionally-directed treatment approaches that rely on NA principles and linkage to NA as central ingredients of the clinical intervention (e.g., Twelve-Step Facilitation studies and studies of treatment programs that embrace some 12-Step principles).

In spite of these limitations, the more than 125 NA-related studies reviewed do illuminate the degree of effectiveness of NA in real world conditions.

## Will NA work for everyone?

No. Effects of participation in NA or other recovery mutual aid groups vary across individuals. The menu of secular, spiritual, and religious recovery mutual aid societies is growing in the U.S. and internationally. We encourage individuals and families seeking recovery support to freely sample these resources and find the best possible personal fit. A directory of recovery mutual aid resources is posted at [facesandvoicesofrecovery.org/resources/mutual-aid-resources/](https://facesandvoicesofrecovery.org/resources/mutual-aid-resources/)

## Conclusion

Future research will continue to illuminate questions related to the effects of NA participation on recovery outcomes. The scientific evidence we reviewed possesses both consistency and coherence. NA members and NA literature boldly assert “We do Recover.” The studies we reviewed provide scientific confirmation and context to that assertion. It is our hope that this analysis will offer evidential grounding for future discussions of the potential role of NA in recovery initiation, recovery maintenance, and enhanced quality of life in long-term addiction recovery.

## Implications

### For Individuals Seeking Recovery Support:

Sustained participation in multiple NA-related activities is associated with increased abstinence and improvements in global health and quality of life. NA is an accessible, affordable, and potentially effective recovery support resource.

### For Treatment Addiction Treatment and Allied Health Professionals and Recovery Coaches:

The positive effects of addiction treatment can be improved and extended when combined with assertive referral to NA or other recovery mutual aid groups.

### For Research Scientists:

Addiction-related research interests are moving beyond studies of addiction-related pathologies and the effects of short-term interventions to the study of pathways and styles of long-term addiction recovery and related support resources. Additional studies are needed to evaluate the effects of NA participation and particular mechanisms of change within NA. Participatory research involving NA membership stakeholders will expand knowledge of the effects of NA participation across diverse populations and cultural contexts.

### For Policy Makers:

Encouraging the expansion of NA and other recovery mutual aid alternatives is associated with enhanced effectiveness of addiction treatment and cost-savings related to reduced health care utilization.





## About the Authors

William White, M.A., is Emeritus Senior Research Consultant at Chestnut Health Systems.

Marc Galanter, M.D., is Professor of Psychiatry at New York University School of Medicine and former president of the American Society of Addiction Medicine.

Keith Humphreys, Ph.D., is the Esther Ting Memorial Professor in the Department of Psychiatry and Behavioral Sciences at Stanford University, a Senior Research Career Scientist at the VA Health Services Research Center, Honorary Professor of Psychiatry at the Institute of Psychiatry, King's College, London, and a former Senior Policy Advisor at the White House Office of National Drug Control Policy.

John Kelly, Ph.D., is the Elizabeth R. Spallin Professor of Psychiatry in Addiction Medicine at Harvard Medical School, the Founder and Director of the Recovery Research Institute / Center for Addiction Medicine at the Massachusetts General Hospital (MGH), and former President of the American Psychological Association (APA) Society of Addiction Psychology.