CHAPTER 5.
RECOVERY: THE MANY PATHS TO WELLNESS

Chapter 5 Preview

On October 4, 2015, tens of thousands of people attended the UNITE to Face Addiction rally in Washington, D.C. The event was one of many signs that a new movement is emerging in America: People in recovery, their family members, and other supporters are banding together to decrease the discrimination associated with substance use disorders and spread the message that people do recover. Much of the success of the event hinged on the growing network of recovery community organizations (RCOs) that have proliferated across the country, creating cultures of recovery and advancing recovery-positive attitudes, programs, and prevention strategies. Recovery advocates have created a once-unimagined vocal and visible recovery presence, as living proof that long-term recovery exists in the millions of individuals who have attained degrees of health and wellness, are leading productive lives, and making valuable contributions to society. Meanwhile, policymakers and health care system leaders in the United States and abroad are beginning to embrace recovery as an organizing framework for approaching addiction as a chronic disorder from which individuals can recover, so long as they have access to evidence-based treatments and responsive long-term supports.[1-4]

Despite the growing popularity and importance of "recovery" as a concept, many people wonder what the term really means and why it matters. This chapter answers these questions by first defining the concept of recovery from substance use disorders and then reviewing the research on the methods and procedures used by mutual aid groups and recovery support services (RSS) to foster and sustain recovery.

KEY FINDINGS*

- Recovery from substance use disorders has had several definitions. Although specific elements of these definitions differ, all agree that recovery goes beyond the remission of symptoms to include a positive change in the whole person. In this regard, "abstinence," though often necessary, is not always sufficient to define recovery.
- Remission from substance use disorders—the reduction of key symptoms below the diagnostic threshold—is more common than most people realize. "Supported" scientific evidence indicates that approximately 50 percent of adults who once met diagnostic criteria for a substance use disorder—or about 25 million people—are currently in stable remission (1 year or longer). Even so, remission from a substance use disorder can take several years and multiple episodes of treatment, RSS, and/or mutual aid.
- There are many paths to recovery. People will choose their pathway based on their cultural values, their socioeconomic status, their psychological and behavioral needs, and the nature of their substance use disorder.
- Mutual aid groups and newly emerging recovery support programs and organizations are a key part of the system of continuing care for substance use disorders in the United States. A range of recovery support services have sprung up all over the United States, including in schools, health care systems, housing, and community settings.
- The state of the science is varied in the recovery field.
  - Well-supported scientific evidence demonstrates the effectiveness of 12-step mutual aid groups focused on alcohol and 12-step facilitation interventions.
  - Evidence for the effectiveness of other recovery supports (educational settings, drug-focused mutual aid groups, and recovery housing) is promising.
  - Many other recovery supports have been studied little or not at all.

*The Centers for Disease Control and Prevention (CDC) summarizes strength of evidence as: "Well-supported": when evidence is derived from multiple controlled trials or large-scale population studies; "Supported": when evidence is derived from rigorous but fewer or smaller trials; and "Promising": when evidence is derived from a practical or clinical sense and is widely practiced.[6]

Recovery Definitions, Values, and Controversies

"Recovery" Has Many Meanings

The word "recovery" is used to mean a range of different things.[4,7] For example, members of Alcoholics Anonymous (AA) may say they are "in recovery" or are "recovering alcoholics." Substance use treatment program directors sometimes speak of their "recovery rate," meaning the proportion of patients who have graduated and remained abstinent. Some activists describe themselves as being part of a "recovery movement." One simple way to make sense of these different definitions of recovery is to divide them into those that describe individual people and their experience and those that describe a set of recovery values and beliefs that could be embraced by individuals, organizations, and activist movements.

Recovery as a Term for Individuals

> **KEY TERMS**
>
> **Remission**. A medical term meaning that major disease symptoms are eliminated or diminished below a pre-determined, harmful level.

Like any other chronic health condition, substance use disorders can go into remission. Among individuals with substance use disorders, this commonly involves the person stopping substance use, or at least reducing it to a safer level—for example, a student who was binge drinking several nights a week during college but reduced his alcohol consumption to one or two drinks a day after graduation. In general health care, treatments that reduce major disease symptoms to normal or "sub-clinical" levels are said to produce remission, and such treatments are thereby considered effective. However, serious substance use disorders are chronic conditions that can involve cycles of abstinence and relapse, possibly over several years following attempts to change.[4,8-11] Thus, sustaining remission among those seriously affected typically requires a personal program of sustained recovery management.[12]

For some people with substance use disorders, especially those whose problems are not severe, remission is the end of a chapter in their life that they rarely think about later, if at all. But for others, particularly those with more severe substance use disorders, remission is a component of a broader change in their behavior, outlook, and identity. That change process becomes an ongoing part of how they think about themselves and their experience with substances. Such people describe themselves as being "in recovery."

Various definitions of individual recovery have been offered nationally and internationally.[13-17] Although they differ in some respects, all of these recovery definitions describe personal changes that are well beyond simply stopping substance use. As such, they are conceptually broader than "abstinence" or "remission." For example, the Betty Ford Institute Consensus Panel defined recovery as "a voluntarily maintained lifestyle characterized by sobriety, personal health, and citizenship."[13] Similarly, the Substance Abuse and Mental Health Services Administration (SAMHSA) defines recovery as "a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential."[16]

The specific meaning of recovery can also vary across cultures and communities. Among some American Indians, recovery is inherently understood to involve the entire family[18] and to draw upon cultural and community resources (see, for example, the organization White Bison). On the other hand, European Americans tend to define recovery in more individual terms. Blacks or African Americans are more likely than individuals of other racial backgrounds to see recovery as requiring complete abstinence from alcohol and drugs.[19] Within some communities, recovery is seen as being aligned with a particular religion, yet in other communities such as the AA fellowship, recovery is explicitly not religious but is instead considered spiritual. Still other communities, such as LifeRing Secular Recovery, SMART Recovery, and Secular Organization for Sobriety, view recovery as an entirely secular process.

Adding further to the diversity of concepts and definitions associated with recovery, in recent years the term has been increasingly applied to recovery from mental illness. Studies of people with schizophrenia, some of whom have co-occurring substance use disorders, have found that recovery is often characterized by increased hope and optimism, and greater life satisfaction.[20] This same research

revealed that whether someone experienced such benefits was strongly related to their experience with broader recovery benefits, such as improved health, improved finances, and a better social life.[21]

Recovery-Related Values and Beliefs

When people talk about the recovery movement, they often invoke a set of values and beliefs that may be embraced by individuals with substance use disorders, families, treatment professionals, and even entire health care systems. Some examples of these values and beliefs include:[22]

- People who suffer from substance use disorders (recovering or not) have essential worth and dignity.
- The shame and discrimination that prevents many individuals from seeking help must be vigorously combated.
- Recovery can be achieved through diverse pathways and should be celebrated.
- Access to high-quality treatment is a human right, although recovery is more than treatment.
- People in recovery and their families have valuable experiences and encouragement to offer others who are struggling with substance use.

Conceptual Controversies in Recovery

Most people who define themselves as being "in recovery" have experience with 12-step-oriented mutual aid groups such as AA and Narcotics Anonymous (NA), but many others enter recovery through professional treatment services, non-12-step mutual aid groups, or other routes of support, such as family, friends, or faith-based organizations.[7] The diversity in pathways to recovery has sometimes provoked debate about the value of some pathways over others.

For example, people who achieve recovery with the support of medications (e.g., methadone, buprenorphine, disulfiram, acamprosate, naltrexone, or even antidepressants) have sometimes been denounced by those who do not take medications, based on assumptions that using medication is inconsistent with recovery principles or a form of drug substitutions or replacement. Nonetheless, members of the National Alliance for Medication Assisted Recovery or Methadone Anonymous refer to themselves as practicing medication-assisted recovery.[23]

Finally, some people who have had severe substance use disorders in the past but no longer meet criteria for a substance use disorder do not think of themselves as operating from a recovery perspective or consider themselves part of a recovery movement, even if they endorse some or all of the beliefs and values associated with recovery.

Perspectives of Those in Recovery

The most comprehensive study of how people define recovery recruited over 9,000 individuals with previous substance use disorders from a range of recovery pathways. Almost all (98 percent) reported characteristics that met formal medical criteria for a severe substance use disorder and three-quarters

labeled themselves as being "in recovery."[7] The study results shed light on how people vary in their understanding of recovery:

- **Abstinence:** 86.0 percent saw abstinence as part of their recovery. The remainder either did not think abstinence was part of recovery in general or felt it was not important for their recovery.[7] Endorsement of abstinence as "essential" was most common among those who were affiliated with 12-step mutual aid groups.[24] This finding was consistent with previous research showing that the great majority of people (about 6 in 7) who have experienced serious substance use disorders consider abstinence essential for recovery.[19]
- **Personal growth:** "Being honest with myself" was endorsed as part of recovery by 98.6 percent of participants.[7] Other almost universally-endorsed elements included "handling negative feelings without using alcohol or drugs" and "being able to enjoy life without alcohol or drugs." Almost all study participants viewed their recovery as a process of growth and development, and about two-thirds saw it as having a spiritual dimension.
- **Service to others:** Engaging in service to others was another prominent component of how study participants defined recovery, perhaps because during periods of heavy substance use, individuals often do damage to others that they later regret. Importantly, service to others has evidence of helping individuals maintain their own recovery.[25,26] A survey of more than 3,000 people in recovery indicated that fulfilling important roles and being civically engaged, such as paying taxes, holding a job, and being a responsible parent and neighbor, became much more common after their substance use ended.[27]

Estimating the Number of People "In Recovery"

FOR MORE ON THIS TOPIC

See Chapter 1 - *Introduction and Overview.*

How much recovery one sees in the world depends on where one looks. Substance use disorders are highly variable in their course, complexity, severity, and impact on health and well-being. In the general population, many people who once met diagnostic criteria for low-severity, "mild" substance use disorders but who later drink or use drugs without related problems do not define themselves as being in recovery. This reality has two implications:

- **First**, the number of people who are in remission from a substance use disorder is, by definition, greater than the number of people who define themselves as being in recovery.
- **Second**, depending on how survey questions are asked and interpreted by respondents, estimates of recovery prevalence may differ substantially. Someone who once met formal criteria for a substance use disorder but no longer does may respond "Yes" to a question asking whether they had "ever had a problem with alcohol or drugs," but may say "No" when asked "Do you consider yourself as being in recovery?"

Perhaps because of this definitional complexity, most clinical outcome studies and community studies of substance use disorders over the years have not included "recovery" as an outcome measure. Instead, abstinence or remission are usually the outcomes that are considered to indicate recovery.[28]

Summarizing data from six large studies, one analysis estimated that the proportion of the United States adult population that is in remission from a substance use disorder of any severity is approximately 10.3 percent (with a range of 5.3 to 15.3 percent).[29] This estimate is consistent with findings from a different national survey, which found that approximately 10 percent, or 1 in 10, of United States adults say, "Yes," when asked, "Did you once have a problem with drugs or alcohol but no longer do?" These percentages translate to roughly 25 million United States adults being in remission.[29] It is not yet known what proportion of adolescents defines themselves as being in recovery.

Despite negative stereotypes of "hopeless addicts," rigorous follow-up studies of treated adult populations, who tend to have the most chronic and severe disorders, show more than 50 percent achieving sustained remission, defined as remission that lasted for at least 1 year.[29] Latest estimates from national epidemiological research using the Fifth Edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) criteria for substance use disorder show similar rates of remission.[30,31] Despite these findings, widely held pessimistic views about the chances of remission or recovery from substance use disorders may continue to affect public opinion in part because sustained recovery lasting a year or longer can take several years and multiple episodes of treatment, recovery support, and/or mutual aid services to achieve. By some estimates, it can take as long as 8 or 9 years after a person first seeks formal help to achieve sustained recovery.[32,33]

In studies published since 2000, the rate of sustained remission following substance use disorder treatment among adolescents is roughly 35 percent. This estimate is provisional because most studies used small samples and/or had short follow-up durations.[29] Despite the potentially lower remission rate for adolescents, early detection and intervention can help a young person get to remission faster.[29]

Recovery-oriented Systems of Care

Increasingly, RSS are being organized into a framework for infusing the entire health and social service system with recovery-related beliefs, values, and approaches.[34] This transformation has been described as:

> *...a shift away from crisis-oriented, deficit-focused, and professionally-directed models of care to a vision of care that is directed by people in recovery, emphasizes the reality and hope of long-term recovery, and recognizes the many pathways to healing for people with addiction and mental health challenges.*[35]

Recovery-oriented Systems of Care (ROSC) embrace the idea that severe substance use disorders are most effectively addressed through a chronic care management model that includes longer term, outpatient care; recovery housing; and recovery coaching and management checkups.[36] Recovery-oriented systems are designed to be easy to navigate for people seeking help, transparent in their operations, and responsive to the cultural diversity of the communities they serve.[36] Treatment in recovery-oriented systems is offered as one component in a range of other services, including recovery supports. Treatment professionals act in a partnership/consultation role, drawing upon each person's goals and strengths, family supports, and community resources. On a systems level, outcomes from Connecticut's Department of Mental Health and Addiction Services (DMHAS) ROSC initiative have

demonstrated a 46 percent increase in individuals served, with 40 percent using outpatient care at lower costs, resulting in a decrease of 25 percent annual cost per client and a 24 percent decrease in overall treatment expenses.[36]

An example of a successful municipal ROSC has been evolving since 2004 in Philadelphia's Department of Behavioral Health and Intellectual disAbility Services (DBHIDS). Three focus areas were aligned to achieve a complete systems transformation in the design and delivery of recovery-oriented services: a change in thinking (concept); a change in behavior (practice); and a change in fiscal, policy, and administrative functions (context). To achieve successful implementation, DBHIDS conducted ongoing activities with a variety of stakeholders including individuals in recovery and their family members, peer and professional providers, administrators and fiscal agents, and agency staff and leadership.[37]

SAMHSA has been instrumental in setting the stage for the emergence of the organized recovery community and its role in the development of ROSC, as well as peer and other RSS. Beginning with the Recovery Community Support Program (RCSP) in 1998, SAMHSA's Center for Substance Abuse Treatment introduced a number of grant initiatives that support recovery, such as Access to Recovery and Targeted Capacity Expansion grants for ROSC and Peer-to-Peer programs. These grants have given states, tribes, and community-based organizations resources and opportunities to create innovative practices and programs that address substance use disorders and promote long-term recovery. Valuable lessons from these grants have been applied to enhance the field, creating movement towards a strong recovery orientation, and highlight the need for rigorous research to identify evidence-based practices for recovery.

In 2010, SAMHSA rolled out Recovery Supports as one of its Strategic Initiatives, highlighting the importance of recovery as a valuable component in the continuum of care. Directly following the establishment of the Recovery Support Strategic Initiative, SAMHSA developed a five-year technical assistance contract to support recovery, known as BRSS-TACS (Bringing Recovery Supports to Scale – Technical Assistance Center Strategy). Through a series of actions and activities, this initiative has served to conceptualize and implement recovery-oriented services and systems across the country; examined the scope and depth of existing and needed recovery supports; supported the growth and quality of the peer workforce; enhanced and extended local, regional, and state recovery initiatives; and supported collaborations and capacity within the recovery movement.

Recovery Supports

Even after a year or 2 of remission is achieved—through treatment or some other route—it can take 4 to 5 more years before the risk of relapse drops below 15 percent, the level of risk that people in the general population have of developing a substance use disorder in their lifetime.[29] As a result, similar to other chronic conditions, a person with a serious substance use disorder often requires ongoing monitoring and management to maintain remission and to provide early re-intervention should the person relapse.[10,32] Recovery support services refer to the collection of community services that can provide emotional and practical support for continuing remission as well as daily structure and rewarding alternatives to substance use.

Just as the development of a substance use disorder involves profound changes in the brain, behavior, and social functioning,[38,39] the process of recovery also involves changes in these and other areas. These changes are typically marked and promoted by acquiring healthy life resources—sometimes called "recovery capital."[14,40-42] These recovery resources include housing, education, employment, and social resources, as well as better overall health and well-being. Recovery support services have been evaluated for effectiveness and are reviewed in the following sections.

Mutual Aid Groups

Mutual aid groups, such as 12-step groups, are perhaps the best known type of RSS, and they share a number of features. The members share a problem or status and they value experiential knowledge—learning from each other's experiences is a central element—and they focus on personal-change goals. The groups are voluntary associations that charge no fees and are self-led by the members.[43]

Mutual aid groups focused on substance use differ from other RSS in important respects. First, they have been in existence longer, having originally been created by American Indians in the 18th century after the introduction of alcohol to North America by Europeans.[44] The best-known mutual aid group today, AA, was founded in 1935. Other more recent RSS innovations and have yet to be studied extensively.[45] Second, mutual aid groups advance specific pathways to recovery, in contrast to the general supports provided by other RSS. They have been studied extensively for problems with alcohol, but not with illicit drugs. For example, an experienced AA member will help new members learn and incorporate AA's specific approach to recovery. In contrast, recovery coaches will support a variety of recovery options and support services, of which AA may be one of many. Third, mutual aid groups have their own self-supporting ecosystem that interacts with, but is fundamentally independent of, other health and social service systems. In contrast, other RSS are often part of formal health and social service systems.

12-Step Mutual Aid Groups

FOR MORE ON THIS TOPIC

See Chapter 1 - *Introduction and Overview.*

Mutual aid groups such as AA, Women for Sobriety, SMART Recovery, and many others are the historical precursors of RSS.[33,46] Most mutual aid group research has been conducted on AA, because AA is the most widely accessed and best-known form of help for alcohol problems in the United States.[46] Research on AA includes systematic reviews of its effectiveness and randomized controlled trials on AA-oriented interventions that actively link individuals with substance use disorders to mutual aid groups.[47-53] Research suggests that professional treatment programs that facilitate involvement in AA and NA lower health care costs by reducing relapses and need for further treatment.[54,55]

Beginning in the 1950s, the AA approach was adapted to illegal drugs by the founders of NA, and in later decades it was adapted to other drugs as well (e.g., Cocaine Anonymous, Marijuana Anonymous, Crystal Meth Anonymous). Alcoholics Anonymous and its derivative programs share two major components: A social fellowship and a 12-step program of action that was formulated based on members' experiences of recovery from severe alcohol use disorders. These 12 steps are ordered in a logical progression, beginning with accepting that one cannot control one's substance use, followed

by abstaining from substances permanently, and transforming one's spiritual outlook, character, and relationships with other people.

Members of 12-step mutual aid groups tend to have a history of chronic and severe substance use disorders and participate in 12-step groups to support their long-term recovery. About 50 percent of adults who begin participation in a 12-step program after participating in a treatment program are still attending 3 years later.[56] Rates of continued attendance for individuals who seek AA directly without first going to treatment are also high, with 41.6 percent of those who start going to meetings still attending 9 to 16 years later.[57]

In the years since the Institute of Medicine called for more rigorous research on AA's effects and mechanisms in its 1990 report *Broadening the Base of Treatment for Alcohol Problems*,[58] research has moved from correlational studies with no control groups to carefully conducted randomized controlled trials. The most rigorous of these clinical trials have compared treatments that link patients to 12-step mutual aid groups to the same treatments without the AA linkage. Most of these trials have focused exclusively on AA, but some have involved mutual aid groups for drug use disorder as either an alternative or a supplement to AA.[52,59,60] A substantial body of research indicates AA is an effective recovery resource;[61-65] NA has been studied less extensively than AA, but evidence on its effectiveness is promising.[43]

KEY TERMS

Clinical trial. Any research study that prospectively assigns human participants or groups of participants to one or more health-related interventions to evaluate the effects on health outcomes.

Randomized controlled trial. A clinical trial of an intervention in which people are randomly assigned either to a group receiving the intervention being studied or to a control group receiving a standard intervention, a placebo (a medicine with no therapeutic effect), or no intervention. At the end of the study, the results from the different groups are compared.

Research studying 12-step mutual aid groups, specifically those focused on alcohol, has shown that participation in the groups promotes an individual's recovery by strengthening recovery-supportive social networks; increasing members' ability to cope with risky social contexts and negative emotions; augmenting motivation to recover; reducing depression, craving, and impulsivity; and enhancing psychological and spiritual well-being.[66-69] Thus, with perhaps the exception of spirituality, many of the same mechanisms of behavior change thought to operate in professional treatments also appear to be important benefits of AA participation.[70]

A strength of 12-step mutual aid group research is that it has included many studies involving people of diverse racial backgrounds, as well as studies focused exclusively on women.[43] For example, American Indian and Alaskan Native groups have adapted AA to incorporate Native spirituality and to allow attendance by entire families. These groups do not limit talking time and incorporate cultural traditions and languages.[71] A culturally appropriate variation of AA[72] includes *The Red Road to Wellbriety*, a Native adaptation of the basic text of AA.[18] Similarly, AA adaptations by Latino immigrants incorporate languages and interaction styles from members' countries of origin.[73,74] Chapters focused on serving Black or African American or gay and lesbian participants also tailor 12-step mutual aid groups to a style that fits the culture of the participants.[46,75] This cultural adaptability, combined with the fact that 12-step groups are easily available, free of charge, and require no paperwork or insurance company documentation to attend, helps explain why these groups are attractive to a remarkably diverse range of people.[76]

Even though mutual aid groups are run by peers, professionals can and should play an important role in helping patients engage and participate. Multiple clinical trials have demonstrated that several clinical procedures are effective in increasing participation in mutual aid groups, and increase the chances for sustained remission and recovery. Health care professionals who help link patients with members of a mutual aid group can significantly increase the likelihood that the patients will attend the group.[50,52,59,77,78] Also, the more time health care professionals spend introducing, explaining, discussing, and encouraging mutual aid group participation during treatment sessions, the more likely the patients will engage, stay involved, and benefit.[47-49,51,53,79-81]

Non-12-step mutual aid group meetings are far less available than are 12-step mutual aid group meetings.[43] This points to a need for more groups aimed at those not comfortable with the 12-step approach,[82] as well as studies assessing their effectiveness.

Al-Anon Family Groups

Friends and family members often suffer when a loved one has a substance use disorder. This may be due to worry about the loved one experiencing accidents, injuries, negative social and legal consequences, diseases, or death, as well as fear of the loved one engaging in destructive behavior, such as stealing, manipulating, or being verbally or physically aggressive. Consequently, a number of mutual aid groups have emerged to provide emotional support to concerned significant others and families and to help them systematically and strategically alter their own unproductive behaviors that have emerged in their efforts to deal with the substance use problems of their affected loved one.

Al-Anon is a mutual aid group commonly sought by families dealing with substance use in a loved one. Like AA, Al-Anon is based on a 12-step philosophy[83] and provides support to concerned family members, affected significant others, and friends through a network of face-to-face and online meetings, whether or not their loved one seeks help and achieves remission or recovery. More than 80 percent of Al-Anon members are women.[84] The principal goal of Al-Anon is to foster emotional stability and "loving detachment" from the loved one rather than coaching members to "get their loved one into treatment or recovery." Al-Anon includes Alateen, which focuses on the specific needs of adolescents affected by a parent's or other family member's substance use.

Clinical trials and other studies of Al-Anon show that participating family members experience reduced depression, anger, and relationship unhappiness, at rates and levels comparable to those of individuals receiving psychological therapies.[85-89] Descriptive research suggests that about half of the newcomers to Al-Anon are still attending 6 months later.[90] Many other family-focused mutual aid groups, such as Nar-Anon, Co-Anon, and Grief Recovery After Substance Passing, have not been researched.

Recovery Coaching

Voluntary and paid recovery coach positions are a new development in the addiction field. Coaches do not provide "treatment" per se, but they often help individuals discharging from treatment to connect to community services while addressing any barriers or problems that may hinder the recovery process.[91] A recovery coach's responsibilities may include providing strategies to maintain abstinence, connecting people to recovery housing and social services, and helping people develop personal skills that maintain recovery.[92] Recovery coaches may or may not be in recovery themselves, but in either case they do not

presume that the same path toward recovery will work for everyone they coach. Some community-based recovery organizations offer training programs for recovery coaches,[93] but no national standardized approach to training coaches has been developed. Because of the role that recovery coaches play in linking patients to RSS, they are increasingly becoming a part of formal clinical treatment teams.[94]

Recovery coaching has the potential to become an important part of RSS and the recovery process. A descriptive study of 56 recently homeless veterans with substance use disorder suggested that supplementing psychotherapy with recovery coaching increased length of abstinence at follow-up 6 months later.[95] Recovery coaches may complement, although not replace, professional case management services in the child welfare, criminal justice, and educational systems.[91] One large randomized trial showed that providing recovery coaches to mothers with a substance use disorder who were involved in the child welfare system reduced the likelihood of the mother's child being arrested by 52 percent.[96] Other rigorous studies have found that providing recovery coaches for mothers with substance use disorder reduces subsequent births with prenatal substance exposure[97] and also increases rates of family reunification.[98]

KEY TERMS

Case management. A coordinated approach to delivering general health care, substance use disorder treatment, mental health, and social services. This approach links clients with appropriate services to address specific needs and goals.

Recovery Housing

Recovery-supportive houses provide both a substance-free environment and mutual support from fellow recovering residents. Many residents stay in recovery housing during and/or after outpatient treatment, with self-determined residency lasting for several months to years. Residents often informally share resources with each other, giving advice borne of experience about how to access health care, find employment, manage legal problems, and interact with the social service system. Some recovery houses are connected with affiliates of the National Alliance of Recovery Residences, a non-profit organization that serves 25 regional affiliate organizations that collectively support more than 25,000 persons in recovery across over 2,500 certified recovery residences.

A leading example of recovery-supportive houses is Oxford Houses, which are peer-run, self-sustaining, substance-free residences that host 6 to 10 recovering individuals per house and require that all members maintain abstinence.[99] They encourage, but do not require, participation in 12-step mutual aid groups. A randomized controlled trial found that people with severe substance use disorders who were randomly assigned to live in an Oxford House after substance use disorder treatment were two times more likely to be abstinent and had higher monthly incomes and lower incarceration rates at follow-up 2 years later than similar individuals assigned to receive standard continuing care.[99] Despite high intervention costs, the net cost benefit to the health care and criminal justice systems from the Oxford House assignment relative to standard care was estimated at approximately $29,000 per person over the 2-year follow-up period.[100] Such beneficial effects of recovery housing may be further enhanced for patients with high levels of 12-step mutual aid group participation.[101,102]

Sober living homes are another type of substance-free living environment.[103] Many of these have a house manager or leader and mandate attendance by residents at 12-step mutual aid groups. An 18-month descriptive study found that residents in sober living homes reduced their alcohol and other

PEER RECOVERY COACHES: WHAT THEY ARE AND WHAT THEY ARE NOT

While some RSS described in this chapter can be delivered by people who are not in recovery, peer recovery coaches identify as being in recovery and use their knowledge and lived experience to inform their work. Although research on peer RSS is limited, results so far are promising.[5] The following are some important distinctions regarding peer recovery coaches.

Peer recovery coaches are…

- Individuals in recovery who help others with substance use disorders achieve and maintain recovery using four types of support:
  - Emotional (empathy, caring, concern);
  - Informational (practical knowledge and vocational assistance);
  - Instrumental (concrete assistance to help individuals gain access to health and social services);
  - Affiliational (introductions to healthy social contacts and recreational pursuits).
- Embedded in the community in a variety of settings, including recovery community organizations; community health, mental health, or addiction clinics; sober living homes and recovery residences; and recovery high school and collegiate recovery programs.
- Peer workers in various treatment and recovery contexts including primary care, emergency departments, mental health clinics, criminal justice, child welfare, homeless agencies, and crisis outreach teams.

They are not…

- Substance use disorder treatment counselors. They do not diagnose or provide formal treatment. Rather, they focus on instilling hope and modeling recovery through the personal, lived experience of addiction and recovery.
- Case managers. Case management typically involves professional or patient service delivery models. The terms "peer" and "recovery coach" are used purposely to reflect a mutual, peer-based collaboration to help people achieve sustained recovery.[90]
- AA or NA sponsors. Peer recovery coaches do not espouse any specific recovery pathway or orientation but rather facilitate all pathways to recovery.
- Nationally standardized, with manuals describing their activities. Peer recovery coaches vary around the country. This stems from the newness of this practice and the diversity of the populations that recovery coaches serve. As use of this type of support expands, some national norms of practice and behavior will likely form over time, but with significant flexibility to enable sensitivity to local realities.

drug use as well as increased employment over time.[104,105] However, unlike the clinical trial of Oxford House, this study had no comparison group, and individuals chose whether to reside in sober living homes rather than being randomly assigned to one. Therefore, residence in the sober living home cannot be assumed to have caused the better outcomes observed.

Taken together, these studies provide promising evidence to suggest that recovery-supportive housing can be both cost-effective and effective in supporting recovery.

RECOVERY HOUSING

Agency or Organization:

Oxford House, Inc. - Silver Spring, Maryland

Purpose:

Oxford House, Inc. is a publicly-supported, nonprofit umbrella organization that provides an oversight network connecting Oxford Houses in 43 states and the District of Columbia. Each Oxford House is a self-supporting and democratically-run substance-free residence.

Goals:

- Provide substance-free housing to individuals in recovery as an effective cost-efficient model.
- Ensure that houses are self-governed and run according to Oxford House standards and guidelines.
- Implement infrastructure to oversee existing houses and establish new houses in areas of need.

"Living in an Oxford House reinforced and reestablished a lot of things that I was not able to do or unwilling to do when I was using. Things like paying rent and working. Things like learning how to live without using drugs. Things like becoming a responsible person. Things like developing healthy relationships. While I resided at an Oxford House, I started working for Oxford House, Inc. As a result, I was willing to help open more Oxford Houses, especially for women."

– Debbie D., former Oxford House resident

Outcomes:

- An 87 percent abstinence rate at the end of a 2-year period living in an Oxford House, four to five times greater than typical outcomes following detoxification and treatment.
- Comparisons between a group living in Oxford House and going to AA/NA versus a similar group that only goes to AA/NA show that the group living in an Oxford House had higher and more positive rates of self-efficacy and self-mastery.
- In a comparison study between Oxford House residents and a group that was assigned usual aftercare services, the Oxford House group had significantly lower substance use (31.3 percent vs. 64.8 percent), higher monthly income ($989 vs. $440), and lower incarceration rates (3 percent vs. 9 percent).

Recovery Management

Recovery-oriented care often use long-term recovery management protocols, such as recovery management check-ups (RMCs),[106] and telephone case monitoring.[107,108] These models have only been studied with professionals, but similar protocols are also being used in peer-directed RSS, where they have yet to be formally evaluated.

Recovery Management Check-ups

The RMC model for substance use disorders draws heavily from monitoring and early re-intervention protocols used for other chronic diseases, such as diabetes and hypertension. With the core components of tracking, assessment, linkage, engagement, and retention, patients are monitored quarterly for several years following an initial treatment. If a relapse occurs, the patient is connected with the necessary services and encouraged to remain in treatment. The main assumption is that early detection and treatment of relapse will improve long-term outcomes.[109]

A clinical trial showed that, compared with patients assigned to usual care, individuals receiving RMCs returned to treatment sooner after relapses, had fewer misuse problems, had more days of abstinence, and were less likely to need treatment at follow-up 2 and 4 years later.[106,110] Recovery management check-ups have also been shown to be effective for people who have co-occurring substance use disorders and mental illnesses[111] and for women with substance use disorders who have been released from jail.[112] RMCs are also cost-effective.[113] Although the check-ups add somewhat to annual care costs, a randomized study showed that they produce greater reductions in costs associated with health care and criminal justice.[113]

Telephone Case Monitoring

Telephone case monitoring is another long-term recovery management and monitoring method for maintaining contact with patients without requiring an in-person appointment. It can be provided by professionals or by peers, although only the former approach has been rigorously studied. One example is an extended case monitoring intervention, which consisted of phone calls on a tapering schedule over the course of several years, with contact becoming more frequent when needed, such as when risk of relapse was high. This intervention was designed to optimize the cost-effectiveness of alcohol treatment through long-term engagement with clients beyond the relatively short treatment episodes.[108]

In a randomized clinical trial, patients receiving telephone case monitoring were half as likely as those not receiving it to drink heavily at 3-year follow-up. Case monitoring also reduced the costs of subsequent outpatient treatment by $240 per person at 1-year follow-up, relative to patients who did not receive the telephone monitoring.[114] Another clinical trial compared weekly telephone monitoring plus brief counseling with two other treatments: standard continuing care and individualized relapse prevention. Telephone monitoring produced the highest rates of abstinence from alcohol at follow-up 12 months later.[115] Furthermore, at 24 months, participants who received telephone monitoring continued to have significantly higher rates of total abstinence than those in standard care.[116] Adding telephone monitoring and counseling to intensive outpatient treatment also has been shown to improve alcohol use outcomes in a randomized clinical trial.[117]

Recovery Community Centers

To further distinguish the peer-led services of these centers from professional treatment services, individuals using the center are referred to as "peers" or "members" and center staff hold positions such as "peer leaders" or "recovery mentors."[92,94]

These centers may host mutual aid group meetings and offer recovery coaching, recovery-focused educational and social events; access to resources, including housing, education, and employment; telephone-based recovery services; and additional recovery community education, advocacy, and service events.[33,118] Some recovery community centers are sites in which community members can engage in advocacy to combat negative public attitudes, educate the community, and improve supports for recovery in the community. Many recovery community centers are typically operated by recovery community organizations.[119]

Recovery community centers have yet to be studied in a rigorous fashion; therefore it is not possible to estimate their effectiveness. Evaluation studies currently underway may provide a more conclusive

judgment of whether and how recovery community centers benefit their members. Recovery community centers are different from professionally-operated substance use disorder treatment programs because they offer support beyond the clinical setting.

Recovery-based Education

High school and college environments can be difficult for students in recovery because of perceived and actual high levels of substance use among other students, peer pressure to engage in substance use, and widespread availability of alcohol and drugs.[120,121] The emergence of high school and collegiate recovery support programs is an important response to this challenge in that they provide recovery-supportive environments, recovery norms, and peer engagement with other students in recovery.

Recovery High Schools

Recovery high schools help students in recovery focus on academic learning while simultaneously receiving RSS. Such schools support abstinence and student efforts to overcome personal issues that may compromise academic performance or threaten continued recovery.[122] The earliest known program opened in 1979, and the number slowly increased to approximately 35 schools in 15 states by 2015.[123]

A study of 17 recovery high schools found that most had small and rapidly changing enrollments, ranging from 12 to 25 students. Rates of abstinence from "all alcohol and other drugs" increased from 20 percent during the 90 days before enrolling to 56 percent since enrolling. Students' opinions of the schools were positive, with 87 percent reporting overall satisfaction.[124] A study of graduates from one recovery high school found that 39 percent reported no drug or alcohol use in the past 30 days and more than 90 percent had enrolled in college.[125] These results are promising, pointing to the need for more research. A rigorous outcomes study is nearing completion that will give a better idea of the impact of recovery high schools.

Recovery in Colleges

Collegiate recovery support programs vary in number and type of RSS. Most provide some combination of recovery residence halls or recovery-specific wings, counseling services, on-site mutual aid group meetings, and other educational and social supports. These services are provided within an environment that facilitates social role modeling of sobriety and connection among recovering peers. The programs often require participants to demonstrate 3 to 6 months with no use of alcohol and drugs as a requirement for admission. Recovering college peers may help these new students effectively manage the environmental risks present on many college campuses.[126]

Participants in collegiate recovery programs often have significant accompanying mental health problems, such as depression or an eating disorder, in addition to their substance use disorder, which can complicate recovery.[127] Nevertheless, observational data from two model programs suggest that rates of return to use (defined as any use of alcohol or other substance) are only 4 to 13 percent in any given semester.[126,128,129] Further, the academic achievement (grade point average and graduation rates) of students in collegiate recovery support programs is better than that of the rest of the undergraduates at the same institution.[127,128,130] Although these results are promising, more research is needed on these programs[131] to fully evaluate their effectiveness.[126]

Social and Recreational Recovery Infrastructures and Social Media

In keeping with the need to support long-term remission and recovery from substance use disorders, social and recreational entities are emerging that make it easier for people in recovery to enjoy activities and social interaction that do not involve alcohol or drugs. Examples include recovery cafes and clubhouses, recovery sports leagues and other sporting activities, and a variety of recovery-focused creative arts, including music and musicians' organizations, visual arts, and theatre and poetry events.[33] Providing these positive alternatives is intended to support recovery as well as provide access to healthy, enjoyable activities. However, no research has yet examined whether participation in these activities produces a significant benefit beyond what might be obtained from other RSS.

Social media, mobile health applications, and recovery-specific online social networking and support sites are growing platforms for providing both intervention and long-term RSS for individuals with substance use disorders, as well as social interaction, friendship, and humor. These are easily accessible and have wide reach. Although research on the impact of these new tools is limited, studies are beginning to show positive benefits, particularly in preventing relapse and supporting recovery.[132,133] Social media supports appear to be especially helpful for young people in particular.[132]

Specific Populations and Recovery

As mentioned earlier, practice and research in the recovery field are relatively new. This has disadvantages in terms of how much is known from scientific research, but it has a compensating advantage: Most studies have been conducted recently and usually with diverse populations. Indeed, the majority of participants in many of the studies cited in this chapter have included Blacks or African Americans, Hispanics or Latinos, and American Indians or Alaska Natives.

Recovery-oriented policies have also supported diverse populations. For example, SAMHSA's Recovery Community Services Program made advancing recovery in diverse communities a central goal and helped support organizations serving a broad range of ethnic, racial, and sexual minority communities. Further, 12-step fellowships such as AA and NA have a long history of supporting meeting spaces that are specific to women; Lesbian, Gay, Bisexual, and Transgender (LGBT) populations; young people; and other groups, including meetings that are conducted in other languages.

For all these reasons, the research and practice conclusions of this chapter can be assumed to be broadly applicable to a range of populations. However, not every single population has received comparable attention:

- Blacks or African Americans have been well represented in recovery research, including in the studies of ROSC, mutual aid groups, and recovery housing discussed in this chapter.
- American Indians or Alaska Natives have maintained recovery movements for centuries. More recently culturally-specific adaptations of recovery approaches (e.g., *The Red Road to Wellbriety*) have been developed. Hispanic or Latino adaptations of AA have been studied, and ROSC have been studied in areas with significant Hispanic or Latino populations (e.g., Philadelphia).

- Native Hawaiians or Other Pacific Islanders have not been studied by recovery researchers, probably because of their small number (one tenth of one percent of the population). They are a population that should be studied in the future.
- Asian-tailored recovery interventions have not been extensively studied and remain an important focus for future research.
- Research on the effectiveness of various recovery pathways within LGBT communities has been limited in quantity and comparability across studies.

Recommendations for Research

Health and social service providers, funders, policymakers, and most of all people with substance use disorders and their families need better information about the effectiveness of the recovery options reviewed in this chapter. Thus, a key research goal for the future is to understand and evaluate the effectiveness, and cost effectiveness, of the emerging range of mutual aid groups and RSS, particularly peer recovery support services and practices and recovery coaches. Another focus of research is new, culturally specific adaptations of long-existent recovery supports, such as AA and NA, as they evolve to meet the needs of an increasingly diverse membership. Such research could increase public and professional awareness of these potentially cost-effective recovery strategies and resources.

Research is also needed on how health care systems themselves can work best with RSS and the workforce that provides RSS. Professional and formal treatment services and RSS have different roots and represent different cultures historically. Creating a fluid, responsive, and more effective recovery-oriented "system" will require greater sensitivity and understanding of the strengths and benefits of each, including rigorous cross-site evaluations for professional RSS strategies. Research should determine the efficacy of peer supports including peer recovery support services, recovery housing, recovery chronic disease management, high school and collegiate recovery programs, and recovery community centers through rigorous, cross-site evaluations.

Although the professionally-led health and social service system should engage with peer-led service organizations, maintaining the informal, grassroots nature of many RSS may be central to their appeal and quite possibly their effectiveness. Thus, a diverse group of stakeholders in the recovery field should come together to create a strategic research agenda that includes:

- The establishment of recovery outcomes and measures;
- The development of a credible methodology for estimating the prevalence of those in recovery;
- Protocols on initiating, stabilizing, and sustaining long-term recovery; and
- Measuring the value of ROSC.

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