Implementing Dual Diagnosis Services for Clients With Severe Mental Illness

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After 20 years of development and research, dual diagnosis services for clients with severe mental illness are emerging as an evidence-based practice. Effective dual diagnosis programs combine mental health and substance abuse interventions that are tailored for the complex needs of clients with comorbid disorders. The authors describe the critical components of effective programs, which include a comprehensive, long-term, staged approach to recovery; assertive outreach; motivational interventions; provision of help to clients in acquiring skills and supports to manage both illnesses and to pursue functional goals; and cultural sensitivity and competence. Many state mental health systems are implementing dual diagnosis services, but high-quality services are rare. The authors provide an overview of the numerous barriers to implementation and describe implementation strategies to overcome the barriers. Current approaches to implementing dual diagnosis programs involve organizational and financing changes at the policy level, clarity of program mission with structural changes to support dual diagnosis services, training and supervision for clinicians, and dissemination of accurate information to consumers and families to support understanding, demand, and advocacy. (*Psychiatric Services* 52:469–476, 2001)

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Substance abuse is the most common and clinically significant comorbid disorder among adults with severe mental illness. In this paper the term "substance abuse" refers to substance use disorders, which include abuse and dependence. "Severe mental illness" refers to long-term psychiatric disorders, such as schizophrenia, that are associated with disability and that fall within the traditional purview of public mental health systems. Finally, the term "dual diagnosis" denotes the co-occurrence of substance abuse and severe mental illness.

There are many populations with dual diagnoses, and there are other common terms for this particular group. Furthermore, dual diagnosis is a misleading term because the individuals in this group are heterogeneous and tend to have multiple impairments rather than just two illnesses. Nevertheless, the term appears consistently in the literature and has acquired some coherence as a referent to particular clients, treatments, programs, and service system issues.

Since the problem of dual diagnosis became clinically apparent in the early 1980s (1,2), researchers have established three basic and consistent findings. First, co-occurrence is common;

about 50 percent of individuals with severe mental disorders are affected by substance abuse (3). Second, dual diagnosis is associated with a variety of negative outcomes, including higher rates of relapse (4), hospitalization (5), violence (6), incarceration (7), homelessness (8), and serious infections such as HIV and hepatitis (9). Third, the parallel but separate mental health and substance abuse treatment systems so common in the United States deliver fragmented and ineffective care (10). Most clients are unable to navigate the separate systems or make sense of disparate messages about treatment and recovery. Often they are excluded or extruded from services in one system because of the comorbid disorder and told to return when the other problem is under control. For those reasons, clinicians, administrators, researchers, family organizations, and clients themselves have been calling for the integration of mental health and substance abuse services for at least 15 years (10,11).

Over that time, integrated dual diagnosis services—that is, treatments and programs—have been steadily developed, refined, and evaluated (11). This paper, part of a series on specific evidence-based practices for persons with severe mental illness, provides an overview of the evolution of dual diagnosis services, the evidence on outcomes and critical components, and the limitations of current research. We also address barriers to the implementation of dual diagnosis services and current strategies for implementation in routine mental health settings.

Editor's note: This article is part of a series of papers on evidence-based practices being published in *Psychiatric Services* this year. The papers focus on mental health practices for which there is substantial evidence of effectiveness and that should therefore be routinely offered in clinical settings. Articles in previous issues have addressed implementing evidence-based practices for persons with severe mental illness and in routine mental health settings and implementing supported employment as an evidence-based practice. Among other topics, future articles will examine evidence-based practices for case management and assertive community treatment, illness self-management, children's services, and services for the elderly population. Robert E. Drake, M.D., Ph.D., and Howard H. Goldman, M.D., Ph.D., are the series editors.

Dual diagnosis services

Treatments, or interventions, are offered within programs that are part of service systems. Dual diagnosis treatments combine or integrate mental health and substance abuse interventions at the level of the clinical interaction. Hence integrated treatment means that the same clinicians or teams of clinicians, working in one setting, provide appropriate mental health and substance abuse interventions in a coordinated fashion. In other words, the caregivers take responsibility for combining the interventions into one coherent package. For the individual with a dual diagnosis, the services appear seamless, with a consistent approach, philosophy, and set of recommendations. The need to negotiate with separate clinical teams, programs, or systems disappears.

Integration involves not only combining appropriate treatments for both disorders but also modifying traditional interventions (12–15). For example, social skills training emphasizes the importance of developing relationships but also the need to avoid social situations that could lead to substance use. Substance abuse counseling goes slowly, in accordance with the cognitive deficits, negative symptoms, vulnerability to confrontation, and greater need for support that are characteristic of many individuals with severe mental illness. Family interventions address understanding and learning to cope with two interacting illnesses.

The goal of dual diagnosis interventions is recovery from two serious illnesses (16). In this context, "recovery" means that the individual with a dual diagnosis learns to manage both illnesses so that he or she can pursue meaningful life goals (17,18).

Research on dual diagnosis practices

In most states, the publicly financed mental health system bears responsibility for providing treatments and support services for clients with severe mental illness. Dual diagnosis treatments for these clients have therefore generally been added to community support programs within the mental health system.

Early studies of dual diagnosis interventions during the 1980s examined the application of traditional substance abuse treatments, such as 12-step groups, to clients with mental disorders within mental health programs. These studies had disappointing results for at least two reasons (19). The clinical programs did not take into account the complex needs of the population, and researchers had not yet solved basic methodologic problems. For example, early programs often failed to incorporate outreach and motivational interventions, and evaluations were limited by lack of reliable and valid assessment of substance abuse. Reviews based on these early studies were understandably pessimistic (20).

At the same time, however, a series of demonstration projects using more comprehensive programs that incorporated assertive outreach and long-term rehabilitation began to show better outcomes. Moreover, the projects developed motivational interventions to help clients who did not perceive or acknowledge their substance abuse or mental illness problems (21).

Building on these insights, projects in the early 1990s incorporated motivational approaches as well as outreach, comprehensiveness, and a long-term perspective, often within the structure of multidisciplinary treatment teams. These later studies, which were uncontrolled but incorporated more valid measures of substance abuse, generally showed positive outcomes, including substantial rates of stable remission of substance abuse (22–25). Of course, uncon-

trolled studies of this type often produce findings that are not replicated in controlled studies; they should be considered pilot studies, which are often needed to refine the intervention and the methodologies of evaluation and which should be followed by controlled investigation to determine evidence-based practice (26).

Controlled research studies of comprehensive dual diagnosis programs began to appear in the mid-1990s. Eight recent studies with experimental or quasi-experimental designs support the effectiveness of integrated dual diagnosis treatments for clients with severe mental illness and substance use disorders (27–34). The type and array of dual diagnosis interventions in these programs vary, but they include several common components, which are reviewed below. The eight studies demonstrated a variety of positive outcomes in domains such as substance abuse, psychiatric symptoms, housing, hospitalization, arrests, functional status, and quality of life (19). Although each had methodological limitations, together they indicate that current integrated treatment programs are more effective than nonintegrated programs. By contrast, the evidence continues to show that dual diagnosis clients in mental health programs that fail to integrate substance abuse interventions have poor outcomes (35).

Critical components

Several components of integrated programs can be considered evidence-based practices because they are almost always present in programs that have demonstrated good outcomes in controlled studies and because their absence is associated with predictable failures (21). For example, dual diagnosis programs that include assertive outreach are able to engage and retain clients at a high rate, while those that fail to include outreach lose many clients.

Staged interventions

Effective programs incorporate, implicitly or explicitly, the concept of stages of treatment (14,36,37). In the simplest conceptualization, stages of treatment include forming a trusting relationship (engagement), helping the engaged client develop the motivation to become involved in recovery-oriented interventions (persuasion), helping the motivated client acquire skills and supports for controlling illnesses and pursuing goals (active treatment), and helping the client in stable remission develop and use strategies for maintaining recovery (relapse prevention).

Clients do not move linearly through stages. They sometimes enter services at advanced levels, skip over or pass rapidly through stages, or relapse to earlier stages. They may be in different stages with respect to mental illness and substance abuse. Nevertheless, the concept of stages has proved useful to program planners and clinicians because clients at different stages respond to stage-specific interventions.

Assertive outreach

Many clients with a dual diagnosis have difficulty linking with services and participating in treatment (38). Effective programs engage clients and members of their support systems by providing assertive outreach, usually through some combination of intensive case management and meetings in the client's residence (21,32). For example, homeless persons with dual diagnoses often benefit from outreach, help with housing, and time to develop a trusting relationship before participating in any formal treatment. These approaches enable clients to gain access to services and maintain needed relationships with a consistent program over months and years. Without such efforts, noncompliance and dropout rates are high (39).

Motivational interventions

Most dual diagnosis clients have little readiness for abstinence-oriented treatment (40,41). Many also lack motivation to manage psychiatric illness and to pursue employment or other functional goals. Effective programs therefore incorporate motivational interventions that are designed to help clients become ready for more definitive interventions aimed at illness self-management (12,14,21). For example, clients who are so demoralized, symptomatic, or confused that they mistakenly believe that alcohol and cocaine are helping them to cope better than medications require education, support, and counseling to develop hope and a realistic understanding of illnesses, drugs, treatments, and goals.

Motivational interventions involve helping the individual identify his or her own goals and to recognize, through a systematic examination of the individual's ambivalence, that not managing one's illnesses interferes with attaining those goals (42). Recent research has demonstrated that clients who are not motivated can be reliably identified (43) and effectively helped with motivational interventions (Carey KB, Carey MP, Maisto SA, et al, unpublished data, 2000).

Counseling

Once clients are motivated to manage their own illnesses, they need to develop skills and supports to control symptoms and to pursue an abstinent lifestyle. Effective programs provide some form of counseling that promotes cognitive and behavioral skills at this stage. The counseling takes different forms and formats, such as group, individual, or family therapy or a combination (15). Few studies have compared specific approaches to counseling, although one study did find preliminary evidence that a cognitive-behavioral approach was superior to a 12-step approach (28). At least three research groups are actively working to refine cognitive-behavioral approaches to substance abuse counseling for dual diagnosis clients (12,13,44). These approaches often incorporate motivational sessions at the beginning of counseling and as needed in subsequent sessions rather than as separate interventions.

Social support interventions

In addition to helping clients build skills for managing their illness and pursuing goals, effective programs focus on strengthening the immediate social environment to help them modify their behavior. These activities, which recognize the role of social networks in recovery from dual disorders (45), include social network or family interventions.

Long-term perspective

Effective programs recognize that recovery tends to occur over months or years in the community. People with severe mental illness and substance abuse do not usually develop stability and functional improvements quickly, even in intensive treatment programs, unless they enter treatment at an advanced stage (19). Instead, they tend to improve over months and years in conjunction with a consistent dual diagnosis program. Effective programs therefore take a long-term, community-based perspective that includes rehabilitation activities to prevent relapses and to enhance gains.

Comprehensiveness

Learning to lead a symptom-free, abstinent lifestyle that is satisfying and sustainable often requires transforming many aspects of one's life—for example, habits, stress management, friends, activities, and housing. Therefore, in effective programs attention to substance abuse as well as mental illness is integrated into all aspects of the existing mental health program and service system rather than isolated as a discrete substance abuse treatment intervention. Inpatient hospitalization, assessment, crisis intervention, medication management, money management, laboratory screening, housing, and vocational rehabilitation incorporate special features that are tailored specifically for dual diagnosis patients. For example, hospitalization is considered a component of the system that supports movement toward recovery by providing diagnosis, stabilization, and linkage with outpatient dual diagnosis interventions during acute episodes (46). Similarly, housing and vocational programs can be used to support the individual with a dual diagnosis in acquiring skills and supports needed for recovery (47).

Cultural sensitivity and competence

A fundamental finding of the demonstration programs of the late 1980s was that cultural sensitivity and competence were critical to engaging clients in dual diagnosis services (21). These demonstrations showed that African Americans, Hispanics, and other underserved groups, such as farm workers, homeless persons, women with children, inner-city residents, and persons in rural areas, could be engaged in dual diagnosis services if the services were tailored to their particular racial, cultural, and other group characteristics.

Many dual diagnosis programs omit some of these critical components as evidence-based practices. However, one consistent finding in the research is that programs that show high fidelity to the model described here—those that incorporate more of the core elements—produce better outcomes than low-fidelity programs (32,48,49). A common misconception about technology transfer is that model programs are not generalizable and that local solutions are superior. A more accurate reading of the research is that modifications for cultural and other local circumstances are important, but critical program components must be replicated to achieve good outcomes.

Limitations of the research

The design and quality of research procedures and data across dual diagnosis studies are inconsistent. In addition, researchers have thus far failed to address a number of issues.

Dual diagnosis research has studied the clinical enterprise, that is, treatments and programs, with little attention to the policy or system perspective. Despite widespread endorsement of integrated dual diagnosis services (13,50–53), there continues to be a general failure at the federal and state levels to resolve problems related to organization and financing (see below). Thus, despite the emergence of many excellent programs around the country, few if any large mental health systems have been able to accomplish widespread implementation of dual diagnosis services for persons with severe mental illness. We are aware of no specific studies of strategies to finance, contract for, reorganize, or train in relation to dual diagnosis services.

Lack of data on the cost of integrated dual diagnosis services and the cost savings of providing good care impedes policy development. Dual diagnosis clients incur high treatment costs in usual services (54,55), and care is costly to their families (56), but effective treatment may be even more costly. Some studies suggest cost savings related to providing good services (57,58), but these are not definitive.

Another limitation of the research is the lack of specificity of dual diagnosis treatments. Interventions differ across studies, manuals and fidelity measures are rare, and no consensus exists on specific approaches to individual counseling, group treatment, family intervention, housing, medications, and other components. Current research will address some of these issues by refining specific components, although efficacy studies may identify complex and expensive interventions that will be impractical in routine mental health settings.

A majority of dual diagnosis clients respond well to integrated outpatient services, but clients who do not respond continue to be at high risk of hospitalization, incarceration, homelessness, HIV infection, and other serious adverse outcomes. Other than one study of long-term residential treatment (33), controlled research has not addressed clients who do not respond to outpatient services. Other potential interventions include outpatient commitment (59), treatments aimed at trauma sequelae (60), money management (61), contingency management (62), and pharmacological approaches using medications such as clozapine (63), disulfiram (64), or naltrexone.

Although a few studies have explored the specific treatment needs of dual diagnosis clients who are women (65,66) or minorities (21,67), particular program modifications for these groups need further validation. For example, many dual diagnosis programs have identified high rates of trauma histories and sequelae among women (46,68,69), and studies have suggested interventions to address trauma; however, no data on outcomes are yet available.

Implementation barriers

Although integrated dual diagnosis services and other evidence-based practices are widely advocated, they

are rarely offered in routine mental health treatment settings (70). The barriers are legion.

Policy barriers

State, county, and city mental health authorities often encounter policies related to organizational structure, financing, regulations, and licensing that militate against the functional integration of mental health and substance abuse services (71). The U.S. public mental health and substance abuse treatment systems grew independently. In most states these services are provided under the auspices of separate cabinet-level departments with separate funding streams, advocacy groups, lobbyists, enabling legislation, information systems, job classifications, and criteria for credentials. Huge fiscal incentives and strong political allies act to maintain the status quo.

Medicaid programs, which fund a significant and growing proportion of treatment for persons with severe mental illness, vary substantially from state to state in the types of mental health and substance abuse services they fund. In most states, mental health and substance abuse agencies have little control over how Medicaid services are reimbursed or administered, which makes it difficult for public systems to ensure that appropriate services are accessible. Medicare, the federal insurance program for elderly and disabled persons, generally pays for a more limited scope of mental health and substance abuse services. Together Medicaid and Medicare pay for more than 30 percent of all behavioral health services, but their impact on dual diagnosis services has not been studied (72).

Program barriers

At the local level, administrators of clinics, centers, and programs have often lacked the clear service models, administrative guidelines, contractual incentives, quality assurance procedures, and outcome measures needed to implement dual diagnosis services. When clinical needs compel them to move ahead anyway, they have difficulty hiring a skilled workforce with experience in providing dual diagnosis interventions and lack the resources to train current supervisors and clinicians.

Clinical barriers

The beliefs of the mental health and substance abuse treatment traditions are inculcated in clinicians, which diminishes the opportunities for cross-fertilization (73). Although an integrated clinical philosophy and a practical approach to dual diagnosis treatment have been clearly delineated for more than a decade (16), educational institutions rarely teach this approach. Consequently, mental health clinicians typically lack training in dual diagnosis treatment and have to rely on informal, self-initiated opportunities for learning current interventions (74). They often avoid diagnosing substance abuse when they believe that it is irrelevant, that it will interfere with funding, or that they cannot treat it. Clinicians trained in substance abuse treatment, as well as recovering dual diagnosis clients, could add expertise and training, but they are often excluded from jobs in the mental health system.

Consumer and family barriers

Clients and their families rarely have good information about dual diagnosis and appropriate services. Few programs offer psychoeducational services related to dual diagnosis, although practical help from families plays a critical role in recovery (75). Family members are often unaware of substance abuse, blame all symptoms on drug abuse, or attribute symptoms and substance use to willful misbehavior. Supporting family involvement is an important but neglected role for clinicians.

Consumers often deny or minimize problems related to substance abuse (40) and, like other substance abusers, believe that alcohol or other drugs are helpful in alleviating distress. They may be legitimately confused about causality because they perceive the immediate effects of drugs rather than the intermediate or long-term consequences (76). The net result is that the individual lacks motivation to pursue active substance abuse treatment, which can reinforce clinical inattention.

Implementation strategies

There are no proven strategies for overcoming the aforementioned barriers to implementing dual diagnosis services, but some suggestions have come from systems and programs that have had moderate success.

Policy strategies

Health care authorities in a majority of, and possibly all, states have current initiatives for creating dual diagnosis services. Because health care policy is often administered at the county or city level, hundreds of individual experiments are occurring. One initial branch point involves the decision to focus broadly on the entire behavioral health system—that is, on all clients with mental health and substance abuse problems—or more narrowly on services for those with severe mental illness and co-occurring substance abuse. We examine here only strategies for dual diagnosis clients with severe mental illness, for whom the implementation issues are relatively distinct.

Commonly used system-level strategies include building a consensus around the vision for integrated services and then conjointly planning; specifying a model; implementing structural, regulatory, and reimbursement changes; establishing contracting mechanisms; defining standards; and funding demonstration programs and training initiatives (77). To our knowledge, few efforts have been made to study these efforts at the system level.

Anecdotal evidence indicates that blending mental health and substance abuse funds appears to have been a relatively unsuccessful strategy, especially early in the course of system change. Fear of losing money to cover nontraditional populations often leads to prolonged disagreements, inability to develop consensus, and abandonment of other plans. As a less controversial, preliminary step, the mental health authority often assumes responsibility for comprehensive care, including substance abuse treatment, for persons with severe mental illness, while the substance abuse authority assists by pledging to help with training and planning.

This limited approach enables the

mental health system to attract and train dual diagnosis specialists who can subsequently train other clinicians and programs. Without structural, regulatory, and funding changes to reinforce the training, however, the expertise may soon disappear—a common experience after demonstration projects. Thus many experts advise that policy issues should be addressed early in the process of implementation to avoid wasting efforts on training (78–80).

New costs to the mental health system for dual diagnosis training could be offset by greater effectiveness in ameliorating substance-abusing behaviors that are associated with hospitalizations. However, saving costs over time assumes that providers are at risk for all treatment costs, that is, that providers have incentives to invest more in outpatient services in order to spend less on inpatient services. Despite the growth of managed care, providers rarely bear complete financial responsibility for the treatment of clients with severe mental illness.

Program strategies

At the level of the mental health clinic or program leadership, the fundamental task is to begin recognizing and treating substance abuse rather than ignoring it or using it as a criterion for exclusion (81). After consensus-building activities to prepare for change, staff need training and supervision to learn new skills, and they must receive reinforcement for acquiring and using these skills effectively. One common strategy is to appoint a director of dual diagnosis services whose job is to plan and oversee the training of staff, the integration of substance abuse awareness and treatment into all aspects of the mental health program, and the monitoring and reinforcement of these activities through medical records, quality assurance activities, and outcome data.

Experts identify the importance of having a single leader for program change (82). Fidelity measures for integrated dual diagnosis services can facilitate successful implementation at the program level (50,83). Monitoring and reinforcing mechanisms also emphasize client-centered outcomes, such as abstinence and employment.

Clinical strategies

Mental health clinicians need to acquire knowledge and a core set of skills related to substance abuse that includes assessing substance abuse, providing motivational interventions for clients who are not ready to participate in abstinence-oriented treatment, and providing counseling for those who are motivated try to maintain abstinence. Clinicians adopt new skills as a result of motivation, instruction, practice, and reinforcement (84). Because substance abuse affects the lives of the great majority of clients with severe mental illness—as a co-occurring disorder, family stressor, or environmental hazard—all clinicians should learn these basic skills. Otherwise substance abuse problems will continue to be missed and untreated in this population (85,86).

Recent research offers evidence that integrated dual diagnosis treatments are effective, but basic interventions are rarely incorporated into the mental health programs in which these clients receive care.

For example, all case managers should recognize and address substance abuse in their daily interactions, as should housing staff, employment specialists, and other staff. Until professional educational programs begin teaching current dual diagnosis treatment techniques (87), mental health system leaders will bear the burden of training staff.

Some staff will become dual diagnosis specialists and acquire more than the basic skills. These individuals will be counted on to lead dual diagnosis groups, family interventions, residential programs, and other specialized services.

Consumer- and family-level strategies

Clients and family members need access to accurate information. Otherwise their opportunities to make informed choices, to request effective services, and to advocate for system changes are severely compromised. Consumer demand and family advocacy can move the health care system toward evidence-based practices, but concerted efforts at the national, state, and local levels are required. Researchers can facilitate their efforts by offering clear messages about the forms, processes, and expected outcomes of evidence-based practices. Similarly, local programs should provide information on available dual diagnosis services to clients and their families.

As consumers move into roles as providers within the mental health system and in consumer-run services, they also need training in dual diagnosis treatments. Local educational programs, such as community colleges, as well as staff training programs should address these needs.

Conclusions

Substance abuse is a common and devastating comorbid disorder among persons with severe mental illness. Recent research offers evidence that integrated dual diagnosis treatments are effective, but basic interventions are rarely incorporated into the mental health programs in which these clients receive care. Successful implementation of dual diagnosis services within mental health systems will depend on changes at several levels: clear policy directives with consistent organizational and financing supports, program changes to incorpo-

rate the mission of addressing co-occurring substance abuse, supports for the acquisition of expertise at the clinical level, and availability of accurate information to consumers and family members. ♦

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