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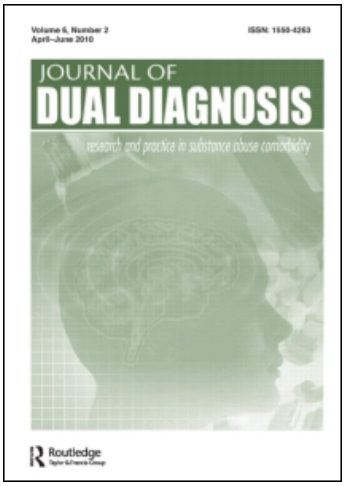

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Implementing Integrated Mental Health and Substance Abuse Services

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Implementing Integrated Mental Health and Substance Abuse Services

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*This review addresses implementation strategies related to integrated treatment for people with co-occurring serious mental illness and substance use disorder. The dominant model over recent years emphasizes the regional technical assistance center as a resource for planning, training, supervision, monitoring, and problem solving. Technical assistance centers have not been formally evaluated. Future implementation studies will rely strongly on learning collaboratives and modern information technology, including comprehensive electronic decision support systems. (*Journal of Dual Diagnosis, 6:251–262, 2010*)*

KEYWORDS Integrated services, implementation strategies, information technology

INTRODUCTION

Health services research addresses many aspects of the organization and financing of health care. One central issue in health services research is the so-called science-to-service gap: simply stated, people rarely receive the treatments that we know are most effective. For example, according to epidemiologic data from the National Comorbidity Study in the early 1990s, 60% of people with serious mental illnesses received no mental health treatments in the past year, 25% received clearly inadequate treatments, and only 15% received moderately adequate treatments (Wang, Demler, & Kessler, 2002). Obviously, the last category falls far short of evidence-based practices.

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The situation may be even worse for people with co-occurring mental illness and substance use disorder. Following many decades of separation, the mental health and addiction fields have developed independent interventions, workforces, clinics, concepts of recovery, and funding streams (Ridgely, Osher, Talbott, & 1987). Despite enormous rates of overlap between mental illnesses and substance use disorders (greater than 50% comorbidity for some conditions; Kessler et al., 1996; Regier et al., 1990), both fields have been slow to modify their approaches to serve clients with co-occurring disorders (Kessler, 2004). This reluctance has persisted for more than two decades after federal reviews recommended integrated services (Ridgely et al.), despite increasing research evidence showing that integrated treatments are more effective than nonintegrated treatments (Dixon et al., 2010; Drake, O'Neal, & Wallach, 2008). Recent surveys found that only about 10% of clients with dual disorders received treatments for both disorders (Substance Abuse and Mental Health Services Administration [SAMHSA], 2007) and only about 4% received integrated interventions (Crystal Blyler, SAMHSA, personal communication, June 18, 2009).

Failure to implement evidence-based practices is a central concern. Implementing evidence-based practices for people with co-occurring disorders has been painfully slow, in part because the public behavioral health system has deteriorated steadily in recent years (Cunningham, McKenzie, & Taylor, 2006; Glied & Frank, 2009; National Alliance on Mental Illness, 2006; New Freedom Commission on Mental Health, 2003). In this article, we review recent efforts to implement integrated dual disorder services, discuss the standard approaches to implementation, and suggest new directions, many of which take advantage of developing information technology.

IMPLEMENTING INTEGRATED MENTAL HEALTH AND SUBSTANCE ABUSE SERVICES

High-quality health care requires attention to client preferences, use of research evidence, and excellent clinical skills—the three pillars of evidence-based medicine (Haynes, Devereaux, & Guyatt, 2002). Yet, research indicates that inadequate information, profit motives, and misaligned financing mechanisms, rather than evidence-based medicine, dominate the diffusion of new interventions (Drake, Skinner, & Goldman, 2008).

General implementation barriers, those that impede all evidence-based practices, are well known (Goldman et al., 2001; Pincus et al., 2007; Torrey et al., 2001). These include failures to align education, training, workflow, supervision, medical records, outcomes, and payment systems with evidence-based practices. As in the rest of health care (Wennberg, 2010), behavioral health in the United States presents a fragmented non-system of care driven by profits and guilds rather than by quality and outcomes (National

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Alliance on Mental Illness, 2006; New Freedom Commission, 2003). Several additional problems specifically impede the adoption of integrated dual disorder treatments.

First, current interventions, such as those described in detail by Mueser, Noordsy, Drake, and Fox (2003) and Fox et al. (2010) may be too complex for the existing workforce. Front-line clinicians tend to be trained narrowly in one discipline, to stay in their jobs only briefly (average 18 months), and to receive minimal supervision due to financial constraints (Blankertz & Robinson, 1997; Rollins, Salyers, Tsai, & Lydick, 2010; Woltmann et al., 2008). Expecting them to learn how to assess interacting mental illnesses and substance use disorders, how to develop individualized client-centered treatment plans, and how to provide specialized, stage-wise, integrated interventions may require more time and training than is feasible (Salyers, Rollins et al., 2007). This was one lesson from the National Evidence-Based Practices Project (McHugo et al., 2007; Swain, Whitley, McHugo, & Drake, 2009).

Second, integrated dual disorders treatment is a complex package of interventions. The evidence for its effectiveness has been diffuse—based on the accumulation of diverse research studies using different populations, treatment models, and outcomes, with very few direct replications—rather than convergent. This heterogeneity has made it difficult to specify interventions for training. As the evidence begins to permit examining categories of interventions (Drake, O'Neal, et al., 2008), some of the more popular components have not been supported. Thus, clinical training often addresses assertive community treatment, medications, and individual counseling, despite lack of strong empirical support for these approaches for this population.

Third, the strongest evidence supports interventions that are often considered secondary by clinicians: peer group treatments, residential treatments, and supported employment (Drake, O'Neal, et al., 2008; Xie, Drake, McHugo, Xie, & Mohandas, 2010). Clinicians may prefer pharmacotherapies and psychotherapies—the core of their training experiences—rather than these more effective interventions (Drake & Wallach, 2008).

In addition to the current study by McGovern, Lambert-Harris, McHugo, Giard, and Mangrum (2010), three recent studies have addressed implementation of integrated dual disorders treatment. In the National Evidence-Based Practices Project, only 2 of 11 programs implementing integrated dual disorders treatment reached high fidelity (Brunette et al., 2008). Prominent facilitators included administrative leadership, expert consultation, training, supervisor mastery, and regular supervision; prominent barriers were continuous staff turnover and financial problems. A much smaller qualitative study in Canada (Brouselle, Lamothe, Sylvain, Foro, & Perreault, 2010) identified similar facilitators: effective leadership, longitudinal training, sharing of expertise among clinicians, and institutional support. In California, eight programs attempted to implement integrated dual disorders treatment using the SAMHSA toolkit (http://store.samhsa.gov/product/SMA08-4367; Brunette, Drake, &

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Lynde, 2002). Six of the eight sites sustained implementation of the model but only one with high fidelity and three with adequate fidelity (Chandler, 2009). Organizational readiness predicted successful implementation.

IMPLEMENTATION STRATEGIES

Traditional educational approaches, such as articles, books, videos, and continuing education conferences, are, by themselves, ineffective implementation strategies (Shojania & Grimshaw, 2005). These efforts at best constitute dissemination rather than implementation—they may increase interest and impart knowledge but do not change clinicians' behaviors. Implementation requires more comprehensive strategies, often involving multiple stakeholder groups (Torrey et al., 2002) and using several techniques (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Torrey et al., 2001). We next consider the most prominent current strategy, the regional technical assistance center, and discuss several newer strategies that have not yet been extensively investigated.

1. Regional Technical Assistance Center. The most widely used current strategy is the regional technical assistance center (Addiction Technology Transfer Center, 2000; Biegel, Swanson, & Kola, 2007; Bjorklund, Monroe-DeVita, Reed, Toulon, & Morse, 2009; Rapp, Goscha, & Carlson, 2010; Salyers, McKasson et al., 2007). In this approach, experts provide consultation to administrators, training and longitudinal supervision to clinicians, and monitoring and feedback via fidelity visits to programs. This strategy was used in the National Evidence-Based Practices Project (McHugo et al., 2007) and in several Co-occurring State Incentive Grants from the Substance Abuse and Mental Health Services Administration. A regional technical assistance center has numerous advantages over training by outside experts: building local expertise and capacity over time, continuous presence, continuity of direction and training, and monitoring and credentialing programs through fidelity reviews. This approach typically starts with early adopters while more timid program leaders develop motivation to change. Ohio and Kansas have used this strategy successfully to implement integrated dual disorder services for several years (Biegel et al., 2007; Rapp et al., 2010).
2. Learning Collaborative. A more recent strategy is the longitudinal learning collaborative model, in which multidisciplinary teams from several practice sites meet with researchers to discuss their processes of care and desired improvements. They select targets for change, establish strategies and measurable goals, visit and support each other, and monitor key outcomes (Horbar et al., 2001; Kilo, 1988; Ovretveit et al., 2002). In 1995, the Institute for Healthcare Improvement formalized the

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strategies of learning collaboratives in the Breakthrough Series (Kilo). The learning collaborative approach emphasizes transparency (sites share process and outcome data), variation (site variation in outcomes), and peer support (participants from low-performing sites learn from those in high-performing sites). The Johnson & Johnson-Dartmouth Community Mental Health Program has included a successful national learning collaborative on supported employment for 10 years (Becker et al., in press; Drake, Becker, Goldman, & Martinez, 2006). The description in this issue of a multistate learning collaborative by McGovern and colleagues (2010) is the best current example of a learning collaborative in dual diagnosis services.

3. Information Technology. Both the Institute of Medicine Committee on Quality of Health in America (2006) and the New Freedom Commission (2003) recommended using modern information technology to improve quality of mental health care. Several recent reviews concluded that information technology can in fact be used to improve the quality of health care (Chaudhry et al., 2006; Dorr et al., 2007; Garg et al., 2005). However, the United States lags behind other Westernized countries in the use of health information technology (Schoen et al., 2006), and behavioral health lags behind other areas of medicine in this area (Mojtabai, 2007).

   Several strategies for using information technology are developing rapidly: distance learning, telemedicine, mobile technology, self-help, and comprehensive electronic decision support systems (Cartreine, Ahern, & Locke, 2010). Each of these could be used to enhance some aspects of implementation. None has been used extensively to implement dual diagnosis services, but we next consider briefly how they might be used.

   3a. Distance Learning. One solution to the problem of staff turnover causing a continuous need for training is electronic distance learning. Programmed learning modules can review basic information, describe interventions, illustrate the interventions with videotaped sequences, and provide tests for e-learners (Cook et al., 2008). Simulated clinical interactions are also possible and are already used for surgical and other types of medical training. The New York State system for co-occurring training comprises 35 distance-learning modules followed by telephone consultations and supervision from regional training centers (Mike Hogan, Director, Office of Mental Health, State of New York, personal communication, October 11, 2010).

   3b. Telemedicine. Telemedicine offers direct links for diagnosis, consultation, or treatment between persons in remote areas and expert clinicians in urban areas (Cartreine et al., 2010). Many rural areas, including some behavioral health services in the Veterans Healthcare Administration, are already linked to hospital-based clinicians

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via telemedicine. This technology should allow dual diagnosis clients and clinicians in small or rural mental health clinics to access the expertise of specialists in university or urban centers (Werner, 2004).

3c. Mobile Technology. People with behavioral health problems have increasing access to the Internet and to mobile technology (Luo, 2008). Clinicians and researchers around the world are using these technologies for education, monitoring, treatment reminders, crisis contacts, and so forth. Soon clients of all types will have individually programmed assistive technology to help them manage their illnesses and stay connected with their clinicians. For example, a person with dual disorders could find the times and locations of local 12-step meetings and could instantly access a list of his or her individual coping strategies to manage craving.

3d. Self-Treatment. Some people will prefer to be completely in control of their own treatment process by using computerized treatment programs, for example, existing cognitive behavioral treatments for smoking cessation or for substance abuse treatment (Bickel, Marsch, Buchhalter, & Badger, 2008). Similarly, computerized self-treatments for many mental disorders already exist (e.g., Reger & Gahm, 2009). Soon such treatments will address the complexities of co-occurring disorders. Self-treatment is a strategy for disseminating evidence-based practices directly to those who need services without requiring professionals to serve as intermediaries.

3e. Comprehensive Electronic Decision Support Systems. Structured supports, or decision aids, can help clients and/or clinicians use research evidence in making decisions regarding health care choices (Drake et al., 2010). Research shows that client decision aids improve the information base and the quality of decision making (i.e., decisions are more consonant with research and with personal values; O'Connor et al., 2009). Similarly, decision supports for practitioners can improve performance, for example, by reducing medication errors and increasing adherence to evidence-based guidelines (Dorr et al., 2007; Garg et al., 2005). Comprehensive decision support systems can provide information and support to clients and clinicians simultaneously, collect information from both parties, and link the two in a collaborative process of shared decision making (Priebe et al., 2007). Deegan, Rapp, Holter, & Riefer (2008) have demonstrated the feasibility of this approach in routine mental health settings.

DISCUSSION

Research on implementation of evidence-based mental health practices has emphasized a broad range of topics: systems-level factors, such as financing

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and federal state and local leadership (Finnerty et al., 2009); organizational factors, such as readiness (Aarons, Cafri, Lugo, & Sawitzky, 2010); willingness to adopt (Panzano & Roth, 2006), and agency leadership (Rapp et al., 2008); workforce issues, such as geographic and ethnic disparities (Schoenwald, Hoagwood, Atkins, Evans, & Ringeisen, 2010); resistance to change (McFarlane, McNary, Dixon, Hornby, & Cimett, 2001); education (Hoge, Tondora, & Stuart, 2003); training and supervision (Bond, Drake, Rapp, McHugo, & Xie, 2009); selection and retention (Woltmann et al., 2008); and quality improvement approaches such as fidelity assessment (McHugo et al., 2007; Schoenwald, Garland et al., 2010) and outcome assessment (Marty, Rapp, McHugo, & Whitley, 2008). Among the most popular strategies for promoting dissemination, implementation, and sustainability of evidence-based practices has been the regional technical assistance center. But, like any strategy, the technical assistance center approach has its limitations. One concern is that technical assistance centers have not been rigorously evaluated. Moreover, technical assistance centers are expensive, often rely on charismatic leadership, and are subject to the vagaries of governmental budgets. Training and technical assistance budgets are the first to be cut in times of recession (Rapp et al., 2010).

Because of developments in information technology, the fields of education, dissemination of information, decision supports, and implementation are changing rapidly. The pace of technology development is unlikely to permit randomized controlled trials at each new step, and services research will have to adjust.

Integrated dual disorders treatment implies the implementation of a complex set of interventions. It requires more structural and organizational changes than does teaching clinicians to use a new psychotherapy. In this respect, implementation of integrated dual disorders treatment resembles the systems change required for the collaborative care model (Unützer et al., 2002). A complex, stepwise implementation strategy needs to be developed and tested.

Beyond implementation, further challenges involve sustainability and flexibility. We know much less about sustainability than about implementation of evidence-based practices (Swain et al., 2009). Moreover, new practices, such as integrated dual disorders treatments, are likely to evolve rapidly as research evolves. Clinicians and programs will need to be prepared for continuous changes—a formidable but exciting challenge for our field.

DISCLOSURES

Drs. Drake and Bond report no financial relationships with commercial interests.

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