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Research on Social Work Practice 2005; 15; 231

DOI: 10.1177/1049731505275059

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Empirically Supported Family and Peer Interventions for Dual Disorders

Barbara C. Moore

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Objective: This article selectively reviews evidence-based family and peer interventions for co-occurring mental illness and substance use disorders. Although few researchers have specifically investigated family interventions for dual disorders, considerable empirical evidence exists for the effectiveness of such interventions in treating each of the two disorders separately. Method: Quality of supporting research is examined and implications for dual disorders are explored. Results: Findings from multiple studies are that inclusion of families in treatment helps to engage treatment-resistant individuals, promotes treatment adherence and psychiatric stability, reduces relapse, reduces alcohol and illicit drug use, and improves well-being of clients and family members. Conclusions: Research and treatment implications are discussed with suggestions for integration of approaches derived from the two historically separate fields.

Keywords: *co-occurring disorders; dual diagnosis; dual disorders; family interventions; mental illness; substance abuse; alcoholism; addiction; social network; evidence-based practice*

A large literature exists on family therapy and its positive effects on alcohol problems (O'Farrell, 1993), drug problems (Stanton & Shadish, 1997), and mental illness (Baucom, Shoham, Mueser, Daiuto, & Stickle, 1998; Dixon et al., 2001). However, very few studies examine the specific impact of family interventions in the treatment of dual disorders. The broad range of evidence supporting family interventions for mental illness and substance use disorders (SUDs) suggests that persons with dual disorders may also benefit from these interventions. Families of persons with dual disorders have identified a need for specific coping strategies to reduce stress and deal constructively with problems created by both disorders (Mueser & Fox, 2002).

Mueser and Fox (2002) outline several reasons why family interventions may improve the course of dual disorders. They note that most dually diagnosed clients remain in regular contact with relatives, that they otherwise tend to have few social supports, and that therefore relatives are often in a position to encourage recovery and

greater self-sufficiency. Conversely, loss of crucial support from relatives can lead to housing instability and homelessness for clients. Family interventions can strengthen family coping responses, preventing loss of family support. Furthermore, family education can prevent relatives' unintentional enabling of clients' substance use by educating family members about the interactions between substance use and mental illness.

BACKGROUND OF DUAL DIAGNOSIS TREATMENT

Provision of appropriate treatment and adequate support services for clients with co-occurring mental illness and SUDs presents a continuing challenge for social workers. For the past two decades, both clinicians and researchers have struggled to understand the complex diagnostic, treatment, and systems issues presented by clients with dual disorders. Lifetime co-occurrence data from the National Comorbidity Survey show that 41.0% to 65.5% of respondents who experienced an addictive disorder also have had at least one mental disorder, and 50.9% of respondents with one or more mental disorders also have a history of at least one addictive disorder (Kessler et al., 1996). Because of these high prevalence rates, social workers in virtually all practice settings will encounter clients with co-occurring disorders and will need to know some basic principles of effective

Author's Note: I thank Wallace J. Gingerich, Victor K. Groza, David E. Biegel, Kathleen J. Farkas, Lenore A. Kola, Christina Delos Reyes, and Elizabeth M. Tracy for their comments on this manuscript. Correspondence concerning this article may be addressed to Barbara C. Moore, Doctoral Program, Mandel School of Applied Social Sciences, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, Ohio 44106-7164 or via e-mail using bcm10@case.edu.

Research on Social Work Practice, Vol. 15 No. 4, July 2005 231-245

DOI: 10.1177/1049731505275059

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intervention. Treating co-occurring disorders has been greatly hindered by traditional divisions within the service delivery system. Mental health and substance abuse treatment developed as separate entities with sometimes conflicting philosophies. Training, bureaucratic organization, and agency infrastructures remain largely separate. Early reviews of services noted that persons with severe mental illness were typically not treated for their SUDs. Existing SUD treatment facilities made no provision for those with co-occurring disorders, and untreated SUDs were and are a leading cause of poor outcomes among the mentally ill (Drake & Mueser, 2000).

To address problems of system fragmentation, several models of integrated mental health and substance abuse treatment services have been developed. In these integrated models, both disorders are treated by the same clinicians in a single setting (Drake & Mueser, 2000). The models also include family intervention, case management, housing, and other components. Mueser, Drake, & Miles (1997) conclude that the evidence from approximately 30 studies on the effects of integrated treatment is "overwhelmingly positive" (p. 97). Although many state mental health systems are implementing integrated dual diagnosis treatment, program developers note that "high quality services are rare" (Drake et al., 2001, p. 469). Family interventions are seldom offered. Often, no more than 10% of clients with severe mental illness receive family psychoeducation or other psychosocial services, even when empirical support for such interventions is strong (Lehman, Steinwachs, & Coinvestigators of the PORT Project, 1998).

Despite the encouraging evidence for the overall effectiveness of integrated treatment approaches, virtually no research exists on the efficacy or effectiveness of specific components of these integrated models when used to treat clients with dual disorders (Drake & Mueser, 2000). Drake et al. (2001) emphasize the use of individual-level motivational interventions and cognitive-behavioral counseling, but they concede that few studies have compared specific approaches to counseling. They note that group, individual, or family formats may be used or a combination of these.

THEORETICAL FRAMEWORK

No theoretical foundation has been developed to explain the effectiveness of integrated dual diagnosis treatment itself, but the integrated treatment model does bear a resemblance to other multilevel treatments such as multisystemic therapy (MST). MST, developed for child

and adolescent problem behavior, makes explicit use of a well-elaborated social-ecological and systems theoretical base (Borduin et al., 1995; Henggeler, Melton, & Smith, 1992; Schoenwald, Henggeler, Brondino, & Rowland, 2000). This theoretical work underlying a structurally similar multilevel intervention could be fruitfully applied to integrated treatment models in the field of co-occurring disorders. One benefit would be that efforts targeting the family and social environment as well as the dually diagnosed individual in treatment could be integrated at the theoretical level.

Although integrated treatment is a multilevel model incorporating such elements as treatment, case management, housing, and supported employment, much of the focus remains on the clients' individual psychological processes. Strategies that also include family and friends in treatment are likely to produce better outcomes. Drake et al. (2001) note that effective programs will focus on improving clients' immediate social environment. Social network and family interventions can enhance clients' ability to modify their behavior. These researchers recognize that establishing a sustainable symptom-free lifestyle often requires transformation of habits, friends, activities, and living situations. Group treatment, family intervention, and housing issues have not been adequately studied, and no consensus on best practices has emerged. "Dual diagnosis research has studied the clinical enterprise . . . with little attention to the policy or system perspective" (Drake et al., 2001, p. 472).

Interventions based on cognitive-behavioral theory are endorsed by Drake and other researchers who have suggested that some form of cognitive-behavioral counseling will be used in effective treatment models (Drake et al., 2001; Drake & Mueser, 2000). These interventions have their origins in the work of B.F. Skinner (1988), Albert Bandura (1976), and Aaron Beck (1976). Although most cognitive-behavioral therapies focus on the individual client by targeting thoughts, attitudes, and beliefs, they also incorporate principles and techniques related to the client's social surroundings. These socially oriented therapeutic elements include reinforcement contingencies, reinforcement by significant others in the environment, and use of positive consequences to encourage desired behavior change. Basic tenets of cognitive-behavioral, operant, and social learning theory are well established in the empirical literature as part of effective interventions for a variety of mental health and substance use problems (Thomlison & Thomlison, 1996).

In contrast to the traditional mental health focus on change at the individual level, the substance abuse field has paid more attention to change within a social context.

Westreich, Galanter, Lifshutz, Metzger, and Silberstein (1996) note that therapeutic communities, a staple of addiction treatment, bring group influence to bear in efforts to promote behavioral change in dually diagnosed populations. Family systems theory and ecological models have been influential among practitioners working with the families of substance abusers (Galanter, 1993). In the historical development of substance abuse treatment methods from Alcoholics Anonymous (AA), Al-Anon, and other communitarian groups, a social-ecological approach is implicit. Theoretical work incorporating this group perspective might facilitate more coherent integration of specific substance abuse and mental health interventions.

From its beginning, AA has recognized the important role of family members in initiating and maintaining recovery. The *Big Book* (Alcoholics Anonymous World Services, 1939) gives specific advice to spouses and families. It describes how to encourage an alcoholic partner to seek help and identifies family behaviors that can have a positive or negative influence on a relative's sobriety. Spouses are warned that excessive criticism can trigger relapse and that lying or covering up for a problem drinker is not helpful. Early AA also believed in the ability of persons with serious mental disorders to recover from alcohol problems. Knowledge of AA's historical positions may provide a conceptual bridge to integrate practice wisdom with cognitive-behavioral and systems theoretical perspectives.

EMPIRICALLY SUPPORTED FAMILY INTERVENTIONS

Because few studies have examined the effectiveness of family or peer interventions for co-occurring disorders, this review will identify specific empirically supported family interventions for persons with either severe mental illness or SUDs. Clinicians may find these interventions immediately useful in working with family members of dually disordered clients. Researchers may choose to build on this work, adapting and extending established principles of family intervention to the needs of populations with co-occurring disorders. Findings from several lines of research are that inclusion of families in treatment helps to engage treatment-resistant individuals (Meyers, Miller, Smith, & Tonigan, 2002), promotes psychiatric stability (McFarlane et al., 1995), reduces relapse (Hogarty et al., 1991), promotes treatment adherence (Fals-Stewart & O'Farrell, 2003), reduces substance use (O'Farrell & Fals-Stewart, 2000), and improves well-

being of clients and family members (Fals-Stewart et al., 2000).

EVIDENCE-BASED PRACTICE

Evidence-based practice has emerged as a predominant paradigm in social work as scientific information relevant to the field has become more available (Howard, McMillen, & Pollio, 2003). The National Association of Social Workers (1996) recognizes in their Code of Ethics that practitioners have an obligation to make full use of research evidence when making professional decisions. Furthermore, choosing interventions based on the best available science will improve social workers' effectiveness and credibility. Competent practice requires that dubious, scientifically unsupported interventions be eschewed in favor of well-tested alternatives (Meehl, 1997). In the practice areas of severe mental illness and SUDs, substantial empirical support for the effectiveness of specific family interventions does exist; therefore, greater utilization of these interventions should be considered. To date, however, the use of family psychoeducation and other evidence-based practices in routine clinical settings has been "alarmingly limited" (Dixon et al., 2001, p. 908).

CRITERIA FOR INCLUSION

This article will examine selected family and peer interventions to evaluate current levels of empirical support and to identify principles likely to be useful in treatment adaptations tailored for dual disorders. Specific interventions and supporting studies have been included to represent, rather than exhaustively describe, several types of family and peer therapeutic approaches. The aim is to present a synopsis, and a major limitation of this approach is that only partial evidence for each intervention is included. More comprehensive literature reviews within each topic area have appeared elsewhere (Baucom et al., 1998; Dixon et al., 2001; O'Farrell, 1993; Stanton & Shadish, 1997). A selective technique was employed because interventions meeting the highest standard of evidence are few in number. The relevant material is thinly scattered under various topic headings throughout the literature and includes work related to several different psychiatric diagnoses and SUDs. As the interventions discussed here are not traditionally grouped together in a single category, comprehensive and systematic searches are problematic. Chosen interventions were judged to be

relevant if they addressed problems prevalent in at least some segment of the dually diagnosed population. Interventions were also chosen to illustrate a broad range of principles that may be useful in theory development.

The few existing family interventions specifically for dual disorders have been included in this review together with interventions from related fields that are supported by controlled research. Articles were selected from searches of the PsycInfo database from 1995 to the present, reference lists of relevant articles, government Web sites, and bibliographies of researchers currently studying the interventions of interest. More attention was given to the most recent literature. Interventions meeting Chambless and Hollon's (1998) established efficacy standard for empirically supported therapies were preferred. Criteria for this designation include randomized controlled trials (RCTs) of a well-specified intervention with replications by at least two different investigatory teams. Three of the interventions considered in this review (family psychoeducation, behavioral couples therapy [BCT], and the community reinforcement approach [CRA]) fully meet the criteria for established efficacy. Other interventions with varying levels of empirical support as noted in the discussion are included because they are historically related to more established interventions or because they suggest promising directions for future work.

The recommendations of Chambless and Hollon (1998) for research on treatment efficacy are particularly challenging for researchers in dual disorders. As clients by definition have more than one disorder, it is difficult to clearly define the population. However, the authors assert that "there is nothing inherent in the logic of RCTs stating that the samples studied must be free from comorbid disorders or easy to treat" (p. 15). They also note the particular difficulty of establishing the specific efficacy of one element in a combination treatment, although they suggest that if a treatment works and can be replicated, a good case can be made for its use even if relative contributions of specific elements are not well understood. Drake et al. (2001) have acknowledged the need to refine research on specific components of integrated treatment.

PRESENTATION OF RESEARCH

Table 1 lists 13 studies representative of current research in family and social network interventions for persons with severe mental illness or SUDs. A brief description of the interventions and discussion of the supporting evidence is presented below.

Family Psychoeducation

Family psychoeducation programs for mental illness typically extend from a 9-month to 5-year time period and target specific diagnoses such as schizophrenia. Single-family and multifamily group formats are used. Clients participate with families in some program variants. Although the focus is on improving outcomes for the ill person, family member well-being is also a consideration. Basic principles of family psychoeducation include improving coordination of all elements of treatment, providing medication management, helping to resolve family conflict, creating crisis plans, expanding social networks, and helping the family with structured problem-solving techniques (Dixon et al., 2001). In McFarlane et al. (1995), goals of both treatment formats include symptom reduction, improved psychosocial functioning, and lowered expressed emotion (EE). Specific interventions engaged family members within 1 week of hospital admissions, provided didactic information about schizophrenia, identified incipient relapse, provided ongoing problem-solving support for at least 2 years, and expanded the family's social network. Patients were not present for family meetings in the initial phases but attended meetings with their families after a didactic phase had been completed. A detailed treatment manual is available by request from William R. McFarlane.

The first three articles in Table 1 (Hogarty et al., 1986, 1991; McFarlane et al., 1995) describe studies of family psychoeducation in the treatment of schizophrenia. All three studies support the effectiveness of psychoeducational family treatment. The McFarlane (1995) study also compared the effectiveness of single-family psychoeducation with multifamily psychoeducation groups. An important 1st-year finding of the Hogarty study was that no relapses occurred in households that changed from high to low EE. EE of family members and effects on relapse of patients with schizophrenia have been extensively studied. In the Hogarty study, EE was assessed by administering an abbreviated form of the Camberwell family interview schedule. Number of critical comments toward the patient, emotional overinvolvement, and hostility were the indicators measured for the EE assessment.

Both the Hogarty and McFarlane (1995) studies found reductions in relapse rates for the family psychoeducation groups, and McFarlane found greater reductions for those receiving the psychoeducational multifamily group intervention (28% relapse rate vs. 42% for the single-family groups). In the McFarlane study, some

TABLE 1: Family and Peer Interventions for Severe Mental Illness, Substance Use Disorders, and Dual Disorders

Authors	Participants or Setting	Design	Outcomes and Comments
Group 1—Severe mental illness McFarlane et al. (1995)	172 acutely psychotic patients, aged 18 to 45, with DSM-III-R chronic schizophrenic disorders; psychiatric inpatient setting and outpatient setting postdischarge at six public hospitals in New York State. Patients living with family member or in contact with family member at least 10 hours per week. Patients with SUDs excluded only if judged physically dependent by inpatient psychiatrist; 36% of sample had documented histories of moderate to heavy substance abuse.	Randomized trial comparing psychoeducational multifamily groups ($n = 83$) to psychoeducational single family treatment ($n = 89$). Treatment was 2 years in duration.	Multifamily groups yielded lower relapse rates (28%) than the single-family modality (42%). Both modalities resulted in decreased symptoms and rehospitalizations with improved medication compliance. McFarlane attributes lower relapse rates of multifamily groups to development of a social network in treatment.
Hogarty et al. (1986)	103 patients with schizophrenia or schizoaffective disorder, aged 17 to 55, residing in high EE households; outpatient setting; treatment delivered as aftercare to hospital admission; patients with SUDs excluded only if psychosis at index admission was related to substance use.	Randomized controlled trial comparing four groups: (a) family treatment plus medication; (b) social skills training plus medication; (c) combination family, social skills, and medication; and (d) medication alone. Treatment was 2 years in duration.	Family treatment plus medication yielded a 1st-year relapse rate of 19%; social skills training plus medication had a relapse rate of 20%; and combined treatment showed an additive effect with a relapse rate of 0% relative to controls (41%). Authors note the absence of relapse in any household that changed from high to low EE.
Hogarty et al. (1991)	Same as above	Same as above	Second-year outcomes showed a persistent and significant effect at 24 months of family intervention on preventing relapse. The effect of social skills training was lost late in the 2nd year.
Group II—Substance use disorders Fals-Stewart et al. (2000)	80 married or cohabitating male patients, aged 20 to 60, at two outpatient substance abuse treatment centers and their partners. Patients had DSM-III-R diagnoses of substance abuse or dependence with primary drug other than alcohol. Couples were excluded if either partner met diagnostic criteria for a psychotic disorder.	Randomized controlled trial comparing IBT ($n = 40$) with BCT ($n = 40$). Twelve-week primary treatment phase followed by 8-week discharge phase. Follow-up for 1 year.	Reanalysis of data from 1996 study that showed BCT more effective than IBT alone in reducing substance use and improving dyadic adjustment; present study notes that a significantly larger proportion of BCT participants had significant reductions in substance use and dyadic adjustment improvements in the posttreatment period than IBT participants.
Fals-Stewart & O'Farrell (2003)	124 men with current DSM-III-R diagnosis of opioid dependence. Patients with current psychotic disorders were excluded.	Randomized controlled trial comparing behavioral family counseling plus individual treatment to IBT only. Both groups were given naltrexone. Both groups received 56 counseling sessions during 24 weeks.	Behavioral family counseling patients took more doses of naltrexone, attended more treatment sessions, had more days abstinent during treatment and for the following year, and had fewer drug-related, legal, and family problems at 1-year follow-up than IBT patients.
O'Farrell, Hooley, Fals-Stewart, & Cutter (1998)	86 patients (78 men, 8 women), aged 20 to 65, with DSM-III-R diagnoses of alcohol abuse or dependence and their partners. Couples were excluded if either partner had a current (past 90 days) psychotic disorder.	Participants were eligible couples entering the CALM behavioral marital therapy project at one of three addictions treatment programs in the greater Boston area. Couples were assessed for high or low EE. Response to treatment of the two groups was compared. Treatment duration was 20 to 24 weeks with 1 year follow-up.	Alcoholic patients with high EE spouses were more likely to relapse, had a shorter time to relapse, and drank on a greater percentage of days during 12 months than patients with low EE spouses. Greater use of Antabuse and more sessions of behavioral marital therapy were associated with reduced relapse for patients with high EE partners.

(continued)

TABLE 1 (continued)

<i>Authors</i>	<i>Participants or Setting</i>	<i>Design</i>	<i>Outcomes and Comments</i>
Smith, Meyers, & Delaney (1998)	106 participants (91 men, 15 women) were chronic homeless persons recruited at a day shelter in Albuquerque, New Mexico. Each met <i>DSM-III-R</i> criteria for alcohol dependence. Exclusion criteria included current psychosis. Some proportion of the participants had comorbid Axis I disorders, but the results for this subgroup are not included in the report.	Participants were randomly assigned to CRA or standard CRA treatment at the shelter. Treatment length was variable with a 3-week minimum and 1-year follow-up.	CRA participants drank less than standard treatment participants at 2-, 4-, 6-, 9- and 12-month follow-ups. BCT is part of the standard CRA intervention. The authors note that some homeless participants were able to return to relatives' homes when no longer inebriated.
Meyers, Miller, Smith, & Tonigan (2002)	90 concerned significant others of treatment-refusing drug users. Identified patients met <i>DSM-III-R</i> criteria for drug abuse or dependence. Identified patients with a current psychiatric disorder were excluded.	Participants were randomly assigned to CRAFT, CRAFT plus aftercare, or AI-Nar FT. Treatment was for 12 weeks with 6 months of aftercare group in the CRAFT plus aftercare condition; 1-year follow-up.	CRAFT was significantly more effective in helping concerned significant others engage treatment-refusing drug users into treatment. Those receiving CRAFT alone engaged 58.6% of the drug users. Those receiving CRAFT plus aftercare engaged 76.7%, and those receiving AI-Nar FT engaged 29.0%. No drug user was engaged after the initial 12 weeks. Partners of spouses who received treatment had a 53% reduction in alcohol consumption from before to after treatment. Partners of spouses who did not receive treatment increased their alcohol consumption slightly.
Thomas, Santa, Bronson, & Oyserman (1986)	25 spouses of partners with a drinking problem who refused to enter treatment were recruited from newspaper advertisements. 15 completed at least 4 months of treatment. Couples were excluded if either partner had a history of severe emotional disorder.	Successive pairs of spouses entering the program were assigned at random with one entering unilateral family therapy for 4 to 6 months and the other entering the delayed treatment condition. When the first of the pair left treatment, the second began treatment; 1-year follow-up.	
Barber & Gilbertson (1996)	48 family members, aged 20 to 68, of heavy drinkers who were highly resistant to change. Drinkers met screening criteria for alcohol dependence.	Clients randomly allocated to one of four conditions: (a) individual counseling pressures to change, (b) group pressures to change, (c) waiting list, and (d) referred to AI-Anon. Duration of treatment 4 to 6 weeks. 11 to 17 weeks between pretest and posttest with no other follow-up.	At posttest, 8 of the 24 drinkers with a partner in individual or group treatment had entered alcohol treatment, 8 had cut down or quit, and 8 remained unchanged. Of the 24 drinkers with a partner in the wait list or AI-Anon condition, none had entered treatment at posttest, and none had cut down or quit drinking.
Galanter, Dermatis, Keller, & Trujillo (2002)	47 cocaine-dependent patients drawn from New York University and Bellevue Hospital referral sources and newspaper advertisements. Met <i>DSM-IV</i> criteria for cocaine abuse or dependence with significant impairment. Able to bring collateral, family member, or friend to provide support in recovery. Persons with comorbid major Axis I disorders excluded.	Clients received two individual therapy sessions per week and one network session per week for the 1st month. By the end of the 24-week treatment period, the network typically met once a month.	17 completers had final 3 urine tests prove negative for cocaine compared to 4 of 18 noncompleters. Across all participants, there was a significant correlation between the number of network sessions attended and the portion of negative urine toxicologies. The author notes that it was the number of network sessions, not individual sessions, that was associated with a good outcome.

Group III—Dual disorders

- Mueser & Fox (2002) 10 families of persons with dual disorders were enrolled in this pilot study at a community mental health center. Clients had *DSM-IV* diagnoses of schizophrenia, schizoaffective disorder, bipolar disorder, or major depression plus a *DSM-IV* substance use disorder within the past 6 months. Clients participated in family group formats for 9 months to 2 years. Single family sessions were intended to last at least 6 months. Six families have completed at least 1 year of treatment; two clients have entered active treatment for their substance use; and three clients achieved relapse prevention stage.
- Clark (2001) 203 patients, aged 18 to 60, in treatment for dual disorders in New Hampshire. Participants had *DSM-III-R* diagnoses of schizophrenia, schizoaffective disorder, or bipolar disorder and a *DSM-III-R* SUD active within the past 6 months. Family member participants were nominated by clients as the family member or friend who gave them the most assistance. Families of clients abstinent at 3 years gave more financial assistance than nonabstainers. More caregiving hours were also associated with substance use reduction.

SUD = substance use disorder; IBT = individual-based treatment; CRA = community reinforcement approach; BCT = behavioral couples therapy; CRAFT = community reinforcement and family training; AI-Nar FT = AI-Anon and Nar-Anon facilitation therapy; *DSM-III-R* = *Diagnostic and Statistical Manual of Mental Disorders*, third edition, revised (American Psychiatric Association, 1987); *DSM-IV* = *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition (American Psychiatric Association, 1994).

comorbid SUDs were included in the sample population. Thirty-six percent of the sample had a documented history of moderate to heavy substance abuse. Those judged physically dependent were excluded. Further specifics about diagnoses and status of substance use at the time of the study are not reported. McFarlane offers possible explanations for the greater effectiveness of the multi-family groups. He suggests that the multifamily group creates a buffering social network for families with expanded problem-solving capacity. He also suggests that group cohesion in the multifamily groups helps to reduce emotional overinvolvement associated with high EE. This effect may be related to his observation that the multifamily groups displayed more positive affect and laughter than family members who participated in the single-family format.

Therapies that are effective for more than one diagnostic group may be particularly useful in the treatment of dual disorders. McFarlane, Dixon, Lukens, and Lucksted (2003) report in a recent literature review that empirical evidence supporting family psychoeducation continues to mount. According to these authors, family psychoeducation is now a treatment of choice for schizophrenia, bipolar disorder, and major depression. At least nine literature reviews conducted between 1995 and 2003 confirm the established efficacy of family psychoeducation. More than 30 RCTs conducted by several investigatory teams have found reduced relapse rates, improved patient recovery, and improved family well-being. Only three studies have found no effect. The authors suggest that these three studies may not have shown positive outcomes because of a more psychodynamic orientation in one instance and immigrant status of the participants in the other two studies. The authors cite two controlled trials supporting family interventions for dual diagnosis (schizophrenia and substance abuse). In examining the results reported in previous literature reviews, the authors note a remarkably consistent 50% reduction of control groups' relapse rates. These differences increase with time. At 24 months, family-based conditions approach 75% reduction in relapse rates compared to controls in some studies. Baucom et al. (1998) found that in 11 of the more rigorous studies with an average duration of nearly 20 months, the overall mean relapse rate for family intervention was about 27% compared to the control groups' 64%. This amounts to a 58% reduction in relapse rate from standard treatment. McFarlane et al. (2003) note that "these differences in outcome are some of the most substantial and consistent

empirical effects achieved by any treatment in the mental health domain" (p. 231).

Behavioral Therapy for Couples and Families

Articles 4, 5, and 6 in Table 1 describe recent studies conducted by William Fals-Stewart, Timothy O'Farrell, and their colleagues. The three studies are controlled trials of BCT, behavioral family counseling (BFC), and behavioral marital therapy (BMT). The first two studies evaluate the effectiveness of family or couples therapy in improving treatment outcomes for substance-abusing populations. The third study compares the differential response of two groups of patients whose partners participated in BMT. The two groups were those with high EE families versus those with low EE families.

In BCT for alcoholism or drug abuse, partners are typically seen together for 15 to 20 outpatient sessions during a period of 5 to 6 months. BCT is initiated soon after the substance user seeks help. Couples engage in a daily sobriety contract in which the patient states the intention not to use alcohol or drugs that day and the partner reaffirms his or her support for the patient's efforts to remain abstinent. The partner records performance of the daily contract on a calendar. The couple's behavioral contract may also include daily ingestion of Antabuse (witnessed and verbally reinforced by the partner), 12-step meetings, and urine drug screens. These tasks are also marked on the calendar and reviewed at therapy sessions. Therapists reinforce the new behavior by praising faithful performance of the contract. BCT assigns exercises to increase positive feelings, communication, and shared activities because these factors also increase the likelihood of sobriety. Better communication skills can help the couple deal with stressors that may otherwise trigger relapse. Specific attention is also given to relapse prevention. BCT increases abstinence and happiness in relationships and reduces domestic violence. Reviewers note that it has not been widely used, despite improved treatment outcomes and lower treatment cost (O'Farrell & Fals-Stewart, 2000). Detailed descriptions of BCT may be found in O'Farrell (1993) and in Rotunda and O'Farrell (1997). Of the closely-related cluster of behavioral interventions for couples and families, BCT has the strongest research support and meets criteria for established efficacy. It has consistently demonstrated positive outcomes in RCTs conducted by at least two research groups during the past 30 years. Limitations of this research are that

most of the studies have focused on alcohol problems. Researchers are now focusing on BCT and other populations. Specific efficacy of BCT compared to other marital therapies has not yet been established (Epstein & McCrady, 1998; Fals-Stewart, O'Farrell, Birchler, Cordova, & Kelley, in press).

BMT is a variant that begins with 10 to 12 initial weekly couple sessions and proceeds to 10 weekly couples' group sessions. As in BCT, BMT attempts to reduce negative communications that are related to relapse (O'Farrell, Hooley, Fals-Stewart, & Cutter, 1998). BFC is a 16-week program added to individual treatment for opioid dependence (Fals-Stewart & O'Farrell, 2003). BFC differs from BCT and BMT in that family members other than intimate partners were included. As part of the daily behavioral contract, family members monitored patient ingestion of naltrexone.

In Fals-Stewart et al. (2000), researchers reanalyze data from a 1996 study that found that 80 substance-abusing men randomly assigned to BCT had fewer days of substance use than patients receiving individual therapy alone (73% days abstinent vs. 65% days abstinent at 12-month follow-up). Along with their partners, they also reported higher levels of dyadic adjustment during treatment and at 1-year follow-up.

In Fals-Stewart and O'Farrell (2003), 124 men entering treatment for opioid dependence were randomly assigned to BFC plus individual treatment or individual treatment alone. The group receiving BFC took more doses of naltrexone, attended more treatment sessions, had more days abstinent during treatment and 1-year posttreatment, and had fewer legal problems, family problems, and problems related to drug use at 1-year follow-up. A limitation of this study is that only one quarter of eligible men participated, largely because of reluctance to take naltrexone.

O'Farrell et al. (1998) compared treatment response of two groups of alcoholic patients in BMT. The two groups were patients with high EE partners ($n = 51$) versus low EE partners ($n = 35$). Because BMT is designed to reduce negative communication, researchers predicted that more sessions of BMT would reduce EE. Researchers found that patients with high EE spouses were more likely to relapse than those with low EE spouses, relapsed in a shorter time, and drank on a greater percentage of days during the 12 months following start of treatment. Greater use of Antabuse and more sessions of BMT were associated with reduced relapse for alcoholic patients with high EE partners.

Community Reinforcement Approach (CRA)

BCT is also a component of the community reinforcement approach (CRA), an empirically supported combination treatment for SUDs. CRA offers BCT to patients when a spouse or partner is available for participation. As this is often not the case, and as CRA is a combination treatment with many components, the specific effects of BCT within CRA are difficult to tease out. Smith, Meyers, and Miller (2001) describe CRA as a comprehensive program with a cognitive-behavioral theoretical base. CRA proposes that environmental contingencies play a powerful role in encouraging or discouraging drinking or drug-using behavior. CRA uses family, social, recreational, and occupational reinforcers to encourage abstinent behavior and support client recovery. The goal is to rearrange multiple aspects of an individual's social environment so that abstinence is more rewarding than drug or alcohol use. Working with a therapist, clients identify internal and external substance abuse triggers, focusing broadly on job support, behavioral skills training, and social activities. Treatment is described in detail in Meyers and Smith (1995) and Budney and Higgins (1998).

The empirical literature on CRA is reviewed by Smith et al. (2001) and by Roozen et al. (2004). Flawed early studies have been followed by some with more rigorous designs and larger sample sizes. Smith, Meyers, and Delaney (1998), discussed below, is an example of one of the more recent studies. CRA has now been successfully used with various populations in diverse settings. The intervention was first tried in inpatient and outpatient treatment for alcoholism. At least four controlled trials supporting the intervention for alcohol have been completed. CRA for alcoholism needs replication by a second research group to fully meet standards for established efficacy. However, an additional four RCTs have investigated use of CRA for cocaine dependence. These trials were conducted by more than one research group. Therefore, CRA meets the established efficacy standard for cocaine dependence. In the future, researchers will need to identify specific components of CRA that contribute to positive outcomes (Stitzer & Higgins, 2000).

In Smith et al. (1998), 106 homeless persons at a day shelter were randomly assigned to CRA or standard treatment. The persons receiving CRA drank less at 2-, 4-, 6-, 9-, and 12-month follow-ups than those receiving standard treatment and also showed more employment and housing stability. Some portion of the sample had

comorbid Axis I conditions, but specific results for these individuals are not presented. Researchers also do not report on the BCT portion of the CRA intervention. It is possible that few of the homeless participants in this study had partners who could be included in treatment.

Community Reinforcement and Family Training (CRAFT)

Community reinforcement and family training (CRAFT) is a promising family intervention for treatment-refusing substance abusers supported by several empirical studies. Because the completed RCTs have not yet been replicated by a second investigatory team, CRAFT is “possibly efficacious, pending replication” (Chambless & Hollon, 1998, p. 8). Developed as an offshoot of CRA, the CRAFT intervention also focuses on changing the drug users’ environmental contingencies to reinforce abstinent behavior. CRAFT is an intervention for families acting unilaterally to encourage a relative to enter treatment. Unilateral family interventions to engage unmotivated substance abusers in treatment are much less studied than interventions involving families after SUD treatment has been initiated (Miller, Meyers, & Tonigan, 1999).

CRAFT differs from earlier family interventions for treatment engagement of substance abusers in that it is nonconfrontational and emphasizes positive consequences for abstinent behavior. In this intervention, the family members or concerned significant others (CSOs) are taught to modify contingencies over which they have control. This serves to increase motivation for the reluctant substance abuser to enter treatment. The intervention as first described in Sisson and Azrin (1986) taught family members to provide pleasant experiences for the drinker when he or she was sober and to schedule competing nondrinking activities. In addition, family members were encouraged to find outside interests for themselves to make them less dependent on the drinker. They also learned to discuss negative consequences of intoxication in a neutral manner, to allow the drinker to accept responsibility for problems caused by drinking, to prepare for potentially dangerous situations, and to suggest counseling for the drinker at moments when the drinker was likely to be receptive to this idea.

Meyers et al. (2002) report on a randomized clinical trial of 90 CSOs who were assigned to one of three conditions: (a) CRAFT, (b) CRAFT with aftercare, or (c) Al-Anon and Nar-Anon facilitation therapy (Al-Nar FT). The two CRAFT conditions were significantly more

effective than the Al-Nar FT in helping CSOs engage their illicit drug-using loved ones into treatment. CRAFT plus aftercare engaged 76.7% of the drug users, CRAFT alone engaged 58.6%, and Al-Nar FT engaged 29.0%. No drug user was engaged after the initial 12 weeks of individual sessions with the CSO. Meyers and colleagues discuss advantages of CRAFT as compared to the traditional family options of Al-Anon referral or the Johnson Institute intervention (JII). In the JII, the alcohol or drug user’s family and social network hold a meeting to confront the substance abuser with specific problems caused by the substance use and to encourage him or her to seek treatment. The researchers note that JII is effective in engaging alcoholics into treatment when families are able to follow through with the intervention. However, only 30% of families randomly assigned to this intervention chose to carry out the confrontational family meeting. An advantage of CRAFT is that it allows families to proceed in an incremental fashion to encourage their loved one to enter treatment.

In another randomized clinical trial, 130 CSOs were assigned to three conditions: (a) Al-Anon FT, (b) preparation for a JII, or (c) CRAFT. Results were 13% of the unmotivated drinkers were engaged in treatment by the Al-Anon FT group, 30% were engaged in treatment by the JII group, and 64% were engaged in treatment by the CRAFT group. The authors note that 70% of the CSOs in the JII condition decided not to go through with the family confrontation. Of the JII CSOs who did go through with the intervention, 75% succeeded in getting the drinker into treatment. A high rate of treatment entry for completed JIIs is a consistent finding across the small number of uncontrolled studies that have investigated this technique (Miller et al., 1999). Barry Loneck (n.d.) is currently planning to study the effectiveness of a modified JII developed specifically for dually diagnosed clients.

Family Interventions Employing a Range of Strategies

The next two studies in Table 1—Thomas, Santa, Bronson, and Oyserman (1986) and Barber and Gilbertson (1996)—examine interventions for treatment-resistant individuals with alcohol problems developed in part from the JII (Johnson, 1980). These earlier approaches are based on behavioral skills training for family members and include techniques that overlap with CRAFT. Although the studies are characterized by small sample size and limited outcome measures, they lend some research support to a behavioral perspective (Miller et al., 1999). In Thomas et al., treatment-refusing partners

of spouses who received treatment had a 53% reduction in alcohol consumption. In Barber and Gilbertson (1996), of 24 alcohol-dependent participants whose partners received treatment, 8 entered treatment, 8 cut down or quit alcohol use, and 8 were unchanged. Although the earlier pilot study was not a controlled trial, the second study does employ a randomized experimental design. In contrast to the JII, both of the later interventions propose a range of strategies for use by family members. The continuum begins with relatively low-risk options and extends up the scale to more confrontational scenarios. Actions can include providing information about the illness, reinforcement of sober behavior, requests for change, and finally confrontation with possible presentation of negative consequences. Thomas et al. describe techniques to help spouses decrease their own negative behaviors such as nagging, threatening, complaining, and enabling. At the same time, the spouses are encouraged to carry out reinforcing and enjoyable sober behaviors with the drinking partner. Contingency contracting, programmed requests, and programmed confrontation are also provided as tools in this intervention. Both interventions are concerned with the well-being of the family members and family functioning as well as the drinkers' recovery.

Interventions Involving Peers

Many researchers have observed that family interventions for dual disorders can be difficult partially because client problems overwhelm families and cause breakdowns of the client's natural support system. Social workers often find that clients have no families or are no longer on good terms with their relatives. This isolation leaves the client with no family to participate in treatment (Mueser & Glynn, 1999). Clients must then rely on support from elsewhere in the social environment.

Marc Galanter's (1993) network therapy provides a method for engaging available support persons in treatment whether or not they are the client's relatives. In network therapy, a client in recovery from substance abuse chooses a person or persons from his or her immediate social network to attend network sessions with the client and provide specific support for the client's abstinence. The client also attends individual sessions. The choice of support persons is not limited to family members. The network may comprise family members, a significant other, a 12-step sponsor, or friends. In Galanter, Dermatis, Keller, and Trujillo (2002), researchers found that 73% of all observed weekly urine samples were

negative for cocaine in a sample of 47 cocaine-dependent participants treated in a 24-week sequence of network therapy, and 45% of the participants tested negative for cocaine in the past 3 weeks of the treatment. Across all participants, there was a significant correlation between the number of network sessions attended and the portion of the participant's urine toxicologies that were negative. Although this study is not an RCT, the authors note that the approach appears to be workable and warrants further investigation.

Franco, Galanter, Castaneda, and Patterson (1995) reported on an inpatient intervention for dually diagnosed patients. They observe that efforts to organize a multifamily group failed because many families "could not be located or refused to become involved in the treatment of their relatives" (p. 229). In this intervention, self-help and peer-led elements provided social support and resocialization on the inpatient unit and helped to connect patients to community resources. Similarly, in a shelter-based treatment for homeless alcoholics, Miescher and Galanter (1996) found that 100 disaffiliated alcoholic outpatients living in a shelter had better outcomes when staying in an abstinence-oriented dormitory than comparison groups in other shelters ($n = 34$) or in independent housing ($n = 55$). The authors attribute the improved outcomes to the social integration provided by the *Clean and Sober* unit, which functioned as an abstinence-specific support group for the homeless men.

Research on Families of Persons with Dual Disorders

Very little research has been conducted on family or peer interventions specifically for clients with dual disorders. Mueser and Fox (2002) have reported on a small pilot study of their Family Intervention for Dual Disorders (FIDD) program. This intervention aims to decrease family stress, provide information, and help families learn problem-solving skills. It is intended to provide ongoing support for up to 2 years. Controlled research is now under way to evaluate effectiveness of FIDD on client treatment and family outcomes. In the pilot study, only six families completed at least 1 year of treatment. They participated in an average of 29 single-family treatment sessions. Researchers reported improvement in substance use outcome for all six clients. Three clients reached the relapse prevention stage, and two clients entered active treatment. One did not enter treatment. An innovative approach used in this study was to teach techniques of motivational interviewing to family members to help them discuss patient goals and enhance motivation

for recovery. In another study, Robin Clark (2001) analyzed data from an earlier 3-year randomized trial of 203 patients in treatment for dual disorders. The analysis included data from interviews with 174 family caregivers of these patients. The researcher found that at 3 years, abstainers had more financial support from families than nonabstainers and that more caregiving hours were also associated with reduced substance use.

DISCUSSION AND APPLICATIONS TO SOCIAL WORK RESEARCH AND PRACTICE

In summary, findings from both the mental health and substance abuse treatment fields provide compelling support for the effectiveness of specific family interventions. Newer interventions designed for families of persons with dual disorders, such as FIDD (Mueser & Fox, 2002) and the modified JII (Loneck, n.d.), represent innovative early efforts to apply techniques developed in prior research and practice to the treatment of clients with dual diagnoses.

MST (Schoenwald et al., 2000) could serve as a model for creating an empirically testable multilevel intervention for treatment of dual disorders based on social ecological and family systems theories. In MST, as in existing integrated treatment models for dual disorders, empirically supported cognitive-behavioral treatment strategies are incorporated into a flexible multilevel framework. Strengths of MST are an emphasis on the reciprocity of human interaction and development of principles to guide intervention across varying circumstances. One principle of MST is that "interventions should target sequences of behavior within and between multiple systems that maintain the identified problems" (Schoenwald et al., 2000, p. 85). In MST adapted for dual disorders, these systems could include partners, friends, family, or the recovery community. In addition to cognitive-behavioral therapies, MST can easily accommodate family systems interventions. O'Farrell (1993) notes that interventions for alcohol problems based on family systems theory have received some preliminary research support. Given the strong influence of family systems approaches on treatment professionals, controlled research on the effectiveness of these approaches is warranted and "long overdue" (O'Farrell, 1993, p. 415). Mark Mattaini (1997) has also described an eco-behavioral clinical approach that combines operant principles with a multilevel systems perspective. This approach "often involves linking the client to new cultures and modifying those that exist, for example, in the

family or the peer group, to support positive change" (Mattaini, 1997, p. xii).

Miller et al. (1999) have contrasted the operant theory underlying the CRAFT intervention for treatment engagement with the Al-Anon concept of detachment and the Johnson Institute confrontational approach. All of these concepts may be useful to practitioners working with dually diagnosed clients and their families. Theoretical integration of these concepts would be helpful and appears possible. For example, an integrative model might propose that emotional detachment can help family members make constructive changes in their own behavior. These constructive changes may include avoiding behaviors that reinforce drinking and increasing behaviors that encourage sobriety. Family members who have achieved a degree of detachment may also be in a better position to set any necessary limits or to calmly urge treatment through a JII.

The finding of O'Farrell et al. (1998) that alcoholics with high EE spouses were more likely to relapse and to use more alcohol than those with low EE spouses is interesting because it replicates in patients with alcohol dependence findings about a relationship between high EE and relapse that was first noted in patients with schizophrenia. The authors observe that the association also exists in patients with depression and bipolar disorder. Moreover, high EE predicts relapse in both male and female patients with schizophrenia across many cultural and ethnic groups. The authors note that the negative, critical behavior characteristic of high EE also matches descriptions of behavior of spouses of alcoholics as described in Al-Anon literature.

Awareness that high family EE is related to alcoholic relapse as well as to relapse in other mental illnesses points to the potential usefulness of Al-Anon and similar self-help groups in family treatment of dual disorders. Although Al-Anon is primarily focused on the well-being of the family, it also offers support and encouragement to alcoholics. Al-Anon literature discourages arguing and scolding, suggesting that criticism can trigger drinking behavior. It teaches families not to protect the alcoholic from the consequences of drinking. It also advises them to encourage all positive activities engaged in by the problem drinker (Al-Anon Family Group Headquarters, 1968; Kellermann, n.d.). Like AA, Al-Anon acknowledges that the family environment plays an important role in the recovery of the alcoholic. As one Al-Anon pamphlet states, "Remember that family members can either start the recovery process or help to keep the illness going. They can work toward recovery by changing to more constructive roles" (Kellermann, 1969, p. 19). It is

important for family members to understand that their actions and choices do matter; family responses affect not only the well-being of family members themselves but can also enhance recovery prospects for a relative with mental illness or a substance use disorder.

The interventions discussed here attempt to effect a broad range of outcomes for both patients and family members. Some are more focused on engagement of treatment-resistant clients; others seek to improve medication adherence or reduce relapse over the long term. Some of these techniques will likely be found to be better than others for each of these specific purposes. Another difference among the interventions is time frame. Interventions focused on relapse prevention tend to consider longer time horizons than interventions designed to engage a family member in treatment in the relatively short term. Although treatment of dual disorders is a long-term process, techniques for more rapid change may prove useful at several points. The strategies may be arranged conceptually on a continuum from lower risk, nonconfrontational techniques to those that are riskier and involve gentle confrontation. The positive and incremental approaches described in the newer interventions are excellent therapeutic strategies with strong empirical support. However, other therapeutic techniques may be more appropriate in particularly urgent situations. Even after trying positive techniques, some families may naturally reach ultimatum points with loved ones who have dual disorders. In these situations, social workers can help families express, in a calm and caring manner, their hope that a loved one will accept treatment. Barry Loneck (1995) describes this type of confrontation as "pointing out reality in a caring, concerned, and supportive way" (p. 33). Judicious use of such an approach may be helpful in preserving crucial family support for patients. Getting patients to treatment earlier in the course of illness may also forestall further deterioration of mental or physical health or prevent legal crises. Meyers, Miller, Hill, and Tonigan (1999) observe that drug-dependent individuals who seek help at an earlier stage often experience more favorable treatment outcomes.

The literature on family and social network interventions provides professionals with many usable options that can be implemented within an integrated treatment context or by a sole practitioner. In the case of particularly well-supported therapies such as family psychoeducation and BCT, the major question is no longer whether the interventions are effective. Mounting evidence indicates that they are. Researchers are now attempting to understand why these interventions, some of which have excellent empirical support, have not yet been incorporated

into practice (McFarlane et al., 2003; O'Farrell & Fals-Stewart, 2000). Sometimes, as noted by Franco et al. (1995), family interventions fail because the families no longer want to be involved with a dually diagnosed client. Yet practitioners who answer the telephone at any substance abuse or mental health treatment facility can attest that a large number of calls always come from concerned family members and friends seeking help for a loved one (Meyers et al., 1999). Offering help to families when they ask for it may be an excellent strategy for engaging families in treatment and may prevent the tragic loss of family support so often seen later in the course of untreated co-occurring substance use and mental disorders.

REFERENCES

- Al-Anon Family Group Headquarters, Inc. (1968). *One day at a time in Al-Anon*. New York: Author.
- Alcoholics Anonymous World Services. (1939). *Alcoholics Anonymous: The story of how many thousands of men and women have recovered from alcoholism*. New York: Author.
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., rev.). Washington, DC: Author.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Bandura, A. (1976). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Barber, J. G., & Gilbertson, R. (1996). An experimental study of brief unilateral intervention for the partners of heavy drinkers. *Research on Social Work Practice*, 6, 325-336.
- Baucum, D. H., Shoham, V., Mueser, K. T., Daiuto, A. D., & Stickle, T. R. (1998). Empirically supported couple and family interventions for marital distress and adult mental health problems. *Journal of Consulting and Clinical Psychology*, 66, 53-88.
- Beck, A. (1976). *Cognitive Therapy and the Emotional Disorders*. New York: International Universities Press.
- Borduin, C. M., Mann, B. J., Cone, L. T., Henggeler, S. W., Fucci, B. R., Blaske, D. M., et al. (1995). Multisystemic treatment of serious juvenile offenders: Long-term prevention of criminality and violence. *Journal of Consulting and Clinical Psychology*, 63, 569-578.
- Budney, A. J., & Higgins, S. T. (1998). *A community reinforcement plus vouchers approach: Treating cocaine addiction* (National Institute of Drug Abuse, NIH Pub. No. 98-4309). Washington, DC: Government Printing Office.
- Chambless, D. L., & Hollon, S. D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology*, 66, 7-18.
- Clark, R. E. (2001). Family support and substance use outcomes for persons with mental illness and substance use disorders. *Schizophrenia Bulletin*, 27, 93-101.
- Dixon, L., McFarlane, W. R., Lefley, H., Lucksted, A., Cohen, M. A., Falloon, I., et al. (2001). Evidence-based practices for services to families of people with psychiatric disabilities. *Psychiatric Services*, 52, 903-910.

- Drake, R. E., Essock, S. M., Shaner, A., Carey, K. B., Minkoff, K., Kola, L., et al. (2001). Implementing dual diagnosis services for clients with severe mental illness. *Psychiatric Services*, 52, 469-476.
- Drake, R. E., & Mueser, K. T. (2000). Psychosocial approaches to dual diagnosis. *Schizophrenia Bulletin*, 26, 105-118.
- Epstein, E. E., & McCrady, B. S. (1998). Behavioral couples treatment of alcohol and drug use disorders: Current status and innovations. *Clinical Psychology Review*, 18, 689-711.
- Fals-Stewart, W., & O'Farrell, T. J. (2003). Behavioral family counseling and naltrexone for male opioid-dependent patients. *Journal of Consulting and Clinical Psychology*, 71, 432-442.
- Fals-Stewart, W., O'Farrell, T. J., Birchler, G. R., Cordova, J., & Kelley, M. L. (in press). Behavioral couples therapy for alcoholism and drug abuse: Where we've been, where we are, and where we're going. *Journal of Cognitive Psychotherapy*.
- Fals-Stewart, W., O'Farrell, T. J., Feehan, M., Birchler, G. R., Tiller, S., & McFarlin, S. K. (2000). Behavioral couples therapy versus individual-based treatment for male substance-abusing patients: An evaluation of significant individual change and comparison of improvement rates. *Journal of Substance Abuse Treatment*, 18, 249-254.
- Franco, H., Galanter, M., Castaneda, R., & Patterson, J. (1995). Combining behavioral and self-help approaches in the inpatient management of dually diagnosed patients. *Journal of Substance Abuse Treatment*, 12, 227-232.
- Galanter, M. (1993). *Network therapy for alcohol and drug abuse: A new approach in practice*. New York: Basic Books.
- Galanter, M., Dermatis, H., Keller, D., & Trujillo, M. (2002). Network therapy for cocaine abuse: Use of family and peer supports. *American Journal on Addictions*, 11, 161-166.
- Henggeler, S. W., Melton, G. B., & Smith, L. A. (1992). Family preservation using multisystemic therapy: An effective alternative to incarcerating serious juvenile offenders. *Journal of Consulting and Clinical Psychology*, 60, 953-961.
- Hogarty, G. E., Anderson, C. M., Reiss, D. J., Kornblith, S. J., Greenwald, D. P., Javna, C. D., et al. (1986). Family psychoeducation, social skills training, and maintenance chemotherapy in aftercare treatment of schizophrenia: I. One-year effects of a controlled study on relapse and expressed emotion. *Archives of General Psychiatry*, 43, 633-642.
- Hogarty, G. E., Anderson, C. M., Reiss, D. J., Kornblith, S. J., Greenwald, D. P., Ulrich, R. F., et al. (1991). Family psychoeducation, social skills training, and maintenance chemotherapy in aftercare treatment of schizophrenia: II. Two-year effects of a controlled study on relapse and adjustment. *Archives of General Psychiatry*, 48, 340-347.
- Howard, M. O., McMillen, C. J., & Pollio, D. E. (2003). Teaching evidence-based practice: Toward a new paradigm for social work education. *Research on Social Work Practice*, 13, 234-259.
- Johnson, V. E. (1980). *I'll quit tomorrow: A practical guide to alcoholism treatment* (Rev. ed.). New York: Harper-Collins.
- Kellermann, J. L. (1969). *Alcoholism: A merry-go-round named denial* [Brochure]. Virginia Beach, VA: Al-Anon Family Groups.
- Kellermann, J. L. (n.d.). *A guide for the family of the alcoholic* [Brochure]. Virginia Beach, VA: Al-Anon Family Groups.
- Kessler, R. C., Nelson, C. B., McGonagle, K. A., Edlund, M. J., Frank, R. G., & Leaf, P. J. (1996). The epidemiology of co-occurring addictive and mental disorders: Implications for prevention and service utilization. *American Journal of Orthopsychiatry*, 66, 17-31.
- Lehman, A. F., Steinwachs, D. M., & Coinvestigators of the PORT Project. (1998). Translating research into practice: The schizophrenia patient outcomes research team treatment recommendations. *Schizophrenia Bulletin*, 24, 1-10.
- Loneck, B. (1995). Getting persons with alcohol and other drug problems into treatment: Teaching the Johnson intervention in the practice curriculum. *Journal of Teaching in Social Work*, 11, 31-48.
- Loneck, B. (n.d.). *Assessing the effectiveness of the modified Johnson intervention at engaging and retaining in treatment clients with dual diagnoses*. Retrieved July 7, 2003, from <http://www.rfmh.org/csipmh/projects/ca3.shtm>
- Mattaini, M. A. (1997). *Clinical practice with individuals*. Washington, DC: National Association of Social Workers.
- McFarlane, W. R., Dixon, L., Lukens, E., & Lucksted, A. (2003). Family psychoeducation and schizophrenia: A review of the literature. *Journal of Marital and Family Therapy*, 29, 223-245.
- McFarlane, W. R., Lukens, E., Link, B., Dushay, R., Deakins, S. A., Newmark, M., et al. (1995). Multiple-family groups and psychoeducation in the treatment of schizophrenia. *Archives of General Psychiatry*, 52, 679-687.
- Meehl, P. E. (1997). Credentialed persons, credentialed knowledge. *Clinical Psychology: Science and Practice*, 4, 91-98.
- Meyers, R. J., Miller, W. R., Hill, D. E., & Tonigan, J. S. (1999). Community reinforcement and family training: Engaging unmotivated drug users in treatment. *Journal of Substance Abuse*, 10, 291-308.
- Meyers, R. J., Miller, W. R., Smith, J. E., & Tonigan, J. S. (2002). A randomized trial of two methods for engaging treatment-refusing drug users through concerned significant others. *Journal of Consulting and Clinical Psychology*, 70, 1182-1185.
- Meyers, R. J., & Smith, J. E. (1995). *Clinical guide to alcohol treatment: The community reinforcement approach*. New York: Guilford.
- Miescher, A., & Galanter, M. (1996). Shelter-based treatment of the homeless alcoholic. *Journal of Substance Abuse Treatment*, 13, 135-140.
- Miller, W. R., Meyers, R. J., & Tonigan, J. S. (1999). Engaging the unmotivated in treatment for alcohol problems: A comparison of three strategies for intervention through family members. *Journal of Consulting and Clinical Psychology*, 67, 688-697.
- Mueser, K. T., Drake, R. E., & Miles, K. M. (1997). *The course and treatment of substance use disorder in persons with severe mental illness*. Retrieved on February 2, 2005, from http://www.nida.nih.gov/pdf/monographs/monograph172/086-109_Mueser.pdf
- Mueser, K. T., & Fox, L. (2002). A family intervention program for dual disorders. *Community Mental Health Journal*, 38, 253-270.
- Mueser, K. T., & Glynn, S. M. (1999). *Behavioral family therapy for psychiatric disorders* (2nd ed.). Oakland, CA: New Harbinger.
- National Association of Social Workers. (1996). *Code of ethics*. Revised and adopted by the Delegate Assembly of the National Association of Social Workers. Washington, DC: National Association of Social Workers.
- O'Farrell, T. J. (Ed.). (1993). *Treating alcohol problems: Marital and family interventions*. New York: Guilford.
- O'Farrell, T. J., & Fals-Stewart, W. (2000). Behavioral couples therapy for alcoholism and drug abuse. *Journal of Substance Abuse Treatment*, 18, 51-54.
- O'Farrell, T. J., Hooley, J., Fals-Stewart, W., & Cutter, H. S. G. (1998). Expressed emotion and relapse in alcoholic patients. *Journal of Consulting and Clinical Psychology*, 66, 744-752.
- Roozen, H. G., Boulogne, J. J., van Tulder, M. W., van den Brink, W., DeJong, C. A. J., & Kerkhof, J. F. M. (2004). A systematic review

- of the effectiveness of the community reinforcement approach in alcohol, cocaine and opioid addiction. *Drug and Alcohol Dependence*, 74, 1-13.
- Rotunda, R., & O'Farrell, T. J. (1997). Marital and family therapy of alcohol use disorders; bridging the gap between research and practice. *Professional Psychology*, 28, 246-252.
- Schoenwald, S. K., Henggeler, S. W., Brondino, M. J., & Rowland, M. D. (2000). Multisystemic therapy: Monitoring treatment fidelity. *Family Process*, 39, 83-103.
- Sisson, R. W., & Azrin, N. H. (1986). Family-member involvement to initiate and promote treatment of problem drinkers. *Journal of Behavior Therapy and Experimental Psychiatry*, 17, 15-21.
- Skinner, B. F. (1988). The operant side of behavior therapy. *Journal of Behavior Therapy and Experimental Psychiatry*, 19, 171-179.
- Smith, J. E., Meyers, R. J., & Delaney, H. D. (1998). The community reinforcement approach with homeless alcohol-dependent individuals. *Journal of Consulting and Clinical Psychology*, 66, 541-548.
- Smith, J. E., Meyers, R. J., & Miller, W. R. (2001). The community reinforcement approach to the treatment of substance-use disorders. *American Journal on Addictions*, 10 (Suppl.), 51-59.
- Stanton, M. D., & Shadish, W. R. (1997). Outcome, attrition, and family-couples treatment for drug abuse: A meta-analysis and review of the controlled, comparative studies. *Psychological Bulletin*, 122, 170-191.
- Stitzer, M. L., & Higgins, S. T. (2000). *Behavioral treatment of drug and alcohol abuse*. Retrieved November 23, 2004, from <http://www.acnp.org/g4/GN401000175/CH171.html>
- Thomas, E. J., Santa, C., Bronson, D., & Oyserman, D. (1986). Unilateral family therapy with the spouses of alcoholics. *Journal of Social Service Research*, 10, 145-162.
- Thomlison, B., & Thomlison, R. (1996). Behavior theory and social work treatment. In F. J. Turner (Ed.), *Social work treatment: Interlocking theoretical approaches* (4th ed., pp. 39-68). New York: Free Press.
- Westreich, L., Galanter, M., Lifshutz, H., Metzger, E. J., & Silberstein, C. (1996). A modified therapeutic community for the dually diagnosed: Greenhouse program at Bellevue Hospital. *Journal of Substance Abuse Treatment*, 13, 533-536.