



Published in final edited form as:

J Marital Fam Ther. 2012 January ; 38(1): 122–144. doi:10.1111/j.1752-0606.2011.00242.x.

REVIEW OF OUTCOME RESEARCH ON MARITAL AND FAMILY THERAPY IN TREATMENT OF ALCOHOLISM

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Abstract

This review of controlled studies of marital and family therapy (MFT) in alcoholism treatment updates our earlier review (XXXXXXX). We conclude that, when the alcoholic is unwilling to seek help, MFT is effective in helping the family cope better and motivating alcoholics to enter treatment. Specifically, both Al-Anon facilitation and referral and spouse coping skills training (based on new findings) help family members cope better; and Community Reinforcement and Family Training (CRAFT) promotes treatment entry and was successfully transported to a community clinic in a new study. Once the alcoholic enters treatment, MFT, particularly behavioral couples therapy (BCT), is clearly more effective than individual treatment at increasing abstinence and improving relationship functioning. New BCT studies showed efficacy with women alcoholics and with gay and lesbian alcoholics; and BCT was successfully transported to a community clinic, a brief BCT version was tested, and BCT was adapted for family members other than spouses. Future studies should evaluate: MFT with couples where both members have a current alcohol problem and with minority patients, mechanisms of change, transportability of evidence-based MFT approaches to clinical practice settings, and replication of MFT outcomes of reduced partner violence and improved child functioning.

INTRODUCTION

Over 35 years ago the U.S. National Institute on Alcohol Abuse and Alcoholism (NIAAA) hailed marital and family therapy as “one of the most outstanding current advances in the area of psychotherapy of alcoholism” (Keller, 1974, p. 161). This NIAAA report also called for controlled studies to test these promising methods.

In 1976, Steinglass (1976) reviewed family treatment studies reported between 1950 to 1975. He concluded that there were few such studies, very little evidence demonstrating the efficacy of family treatment, and significant methodological shortcomings in most studies.

In 1989, McCrady (1989) in her update to Steinglass's earlier review concluded that there was still a paucity of well-controlled research in this area. McCrady noted that clinically popular family disease and family systems approaches had little or no empirical support, and that behavioral approaches which had relatively more empirical support were virtually unused in clinical practice.

In 1995, reviewing studies between 1972 to 1993, Edwards and Steinglass (1995) concluded that family therapy was effective in motivating alcoholics to enter treatment, marginally more effective than individual alcoholism treatment once the drinker had sought help, and modestly beneficial in supporting aftercare and relapse prevention. They found no data on

cost-effectiveness of family treatment or on the impact of gender of the alcoholic patient in that studies included mostly male patients.

In 2003, O'Farrell and Fals-Stewart (2003) presented a comprehensive review through mid-2002 of 38 controlled studies of marital and family therapy (MFT) in alcoholism treatment. They concluded that, when the alcoholic is unwilling to seek help, Al-Anon facilitation and referral help family members cope better; and Community Reinforcement and Family Training promotes treatment entry but the Johnson intervention does not. They also concluded that once the alcoholic enters treatment, MFT, particularly behavioral couples therapy (BCT), is clearly more effective than individual treatment at increasing abstinence and improving relationship functioning. Finally, they called for future studies of MFT with women and with minority patients, mechanisms and processes of change, and transportability of evidence-based MFT approaches to clinical settings.

This paper reviews studies of the effectiveness of MFT in alcoholism treatment. It updates the O'Farrell and Fals-Stewart (2003) review (referred to below as "the 2003 review"). It covers studies reported between 2002 and mid-2010 that compared MFT with one or more comparison conditions.

This paper presents study results of MFT for two main stages of change to (a) improve family coping and/or initiate change when the alcoholic individual is unwilling to seek help or (b) aid the alcoholic's recovery once the individual has sought help. We also discuss the current status of issues raised by the earlier reviews and suggest future directions for research. Finally, we consider the implications of outcome research for clinical practice by marriage and family therapists and summarize our final conclusions.

Potentially relevant studies were identified in several ways: (a) searching bibliographies of prior review articles (Powers, Vedell, & Emmelkamp, 2008; Stanton, 2004; Velleman, Templeton & Copello, 2005); (b) performing database searches through April 2010 of PsycINFO, Current Contents, Social Sciences Citation Index, PUBMED, Project CORK, ETOH, and Dissertation Abstracts Online; and (c) searching the bibliographies of all articles identified by the first two steps.

Studies were included in this review if they met the following criteria. First, studies had to evaluate one or more treatment groups, in which spouses and/or other family members of an alcoholic adult were involved in treatment efforts to (a) improve family coping and/or initiate change when the alcoholic individual was unwilling to seek help or (b) aid the alcoholic's recovery once the individual had sought help. Second, studies had to include a comparison group, either a wait-list control group, an individually-based treatment without a family-involved component, or an alternative family treatment method. Third, in most studies cases were randomly assigned to treatment and comparison conditions, but as with prior reviews, a few quasi-experimental studies without random assignment were included. Finally, we required objective outcome data in one or more of five categories: (1) alcohol consumption or alcohol-related problems by the alcoholic person, (2) alcoholism treatment entry or attendance, (3) couple or family adjustment, (4) individual adjustment for the alcoholic person (i.e., unrelated to alcohol use), and (5) individual adjustment for the spouse or other family member.

In describing study results below, unless stated otherwise, outcomes described as favoring a treatment over a comparison group mean that the difference between the treatment and comparison groups reached statistical significance in the original study. Similarly, outcomes described as showing improvement from before to some time point after treatment mean that the difference between the outcome scores before and after treatment reached statistical significance in the original study.

HELPING THE FAMILY AND INITIATING CHANGE WHEN THE ALCOHOLIC RESISTS TREATMENT

The studies reviewed in this section evaluated treatment in which spouses or other family members of an alcoholic adult took part in efforts to (a) improve family members' coping and well-being or (b) initiate change when the alcoholic individual was unwilling to seek help.

Helping the Family

Spouses and other family members often experience many stressors and heightened emotional distress caused by the negative consequences of the alcoholic's drinking. Two approaches try to help family members cope with their emotional distress and concentrate on their own motivations for change rather than trying to motivate the drinker to change. These are efforts to help the family member use the concepts and resources of Al-Anon, or to teach specific coping skills to deal with alcohol-related situations involving the drinker.

Al-Anon and the Twelve-step Family Disease Approach—This twelve-step program is the most widely used source of support for family members troubled by a loved one's alcohol problem. Al-Anon advocates that family members detach themselves from the alcoholic's drinking in a loving way, accept they are powerless to control the alcoholic, and seek support from other Al-Anon members (Al-Anon Family Groups, 1981).

The first controlled studies of the 12-step family disease approach were a major development cited by the 2003 review. These studies showed improvement in concerned others' functioning following Al-Anon Facilitation Therapy (AFT; Nowinski, 1999) or referral to Al-Anon that was greater than in a waitlist control group (Dittrich & Trapold, 1984; Barber & Gilbertson, 1996; Rychtarik & McGillicuddy, 1998) and equivalent to other family-involved treatments (Rychtarik & McGillicuddy, 1998; Miller, Myers, & Tonigan, 1999). No new studies of the Al-Anon twelve-step family disease approach have been done since the 2003 review.

Coping Skills Therapy—Zetterlind, Hansson, Aberg-Orbeck and Berglund (2001) randomly assigned 39 spouses of alcoholics who were not in treatment to coping skills therapy, group support, or a one-session information only control group. Results at 12-month follow-up (cited in the 2003 review) showed that spouses in all 3 groups had reduced emotional distress and improved coping strategies; and that spouses who got coping skills therapy and group support had greater decreases in emotional distress than did the information only control group. Results at 24-month follow-up (Hansson, Zetterlind, Åberg-Örbeck & Berglund, 2004) indicated that improvements at 12-month follow-up were maintained at 24-months. However, the 3 groups had similar outcomes at 24 months. Spouses above the Swedish mean on emotional distress at baseline showed less improvement in the information group than in the two therapy groups combined.

Rychtarik and McGillicuddy (2005) published complete results of a study that had been cited in the 2003 review based on conference presentations (Rychtarik & McGillicuddy, 1998, 2002). This study randomly assigned 171 women with male alcoholic partners who were not in treatment to manual-guided coping skill training, a manual-guided Al-Anon facilitation program, or a waiting-list control group. Follow-up assessments were conducted post-treatment, and 6 and 12 months post-treatment. On a role-play observational measure of coping skills, skill training therapy was better than Al-Anon facilitation and both treatment groups were better than the wait-list control. Spouses in both treatment groups reported less depression and anxiety than those in the wait-list control. Partner drinking

decreased from pretreatment to follow-up in both of the active treatment conditions. However, for partners with a history of relationship violence, drinking improved in the coping skills treatment condition but worsened in the Al-Anon facilitation condition. Finally, spouses who got coping skills therapy received less violence from their male partners in the year after treatment than did women who got Al-Anon facilitation therapy. Thus, coping skills training may be particularly beneficial for women experiencing physical violence from a partner with alcohol dependence.

Copello et al. (2009) studied a primary care intervention for family members affected by the alcohol or drug problem of a close relative. They randomized 143 family members to receive a full or brief version of a manualized intervention based on the stress-strain-coping-support model of addiction and the family (Orford et al., 1998). The full intervention had a self-help manual plus 5 individual sessions to help the family member identify sources of stress, provide information about substances, explore coping behaviors, and consider and enhance social support. The brief version had one session with the provider who introduced the therapy and provided the self-help manual. Brief and full intervention groups both improved significantly in psychological symptoms and coping behaviors from baseline to 12 weeks later, but the two interventions did not differ significantly on symptom or coping outcomes. The authors concluded that a self-help manual delivered by a primary care professional may be as effective for family members as several face-to-face sessions with the professional.

Other Approaches to Helping the Family—Son & Choi (2010), noting the difficulty Koreans have in expressing anger, developed a manualized cognitive-behavioral anger management treatment to promote anger expression and anger management for family members of patients with alcohol use disorders. They systematically (but not randomly) assigned 39 family members to receive anger management and 24 to a control group. Pre-post scores on the Korean Anger Expression Inventory indicated that family members who received the anger management program improved more in healthy anger expression than those in the control group.

An Australian study (Halford, Price, Kelly, Bouma & Young, 2001) randomly assigned 61 women whose husbands drank heavily but were not currently in alcohol treatment to (a) supportive counseling, (b) stress management, or (c) alcohol-focused couple therapy (AFCT) plus stress management. Wives' reports of their own stress, their husbands' alcohol consumption, and relationship functioning were assessed at pre- and post-treatment and at 6-month follow-up. All three treatments showed a reduction in women's stress, with trends for somewhat greater stress reduction in stress management and AFCT than in supportive counseling. None of the treatments produced clinically significant improvements in men's drinking or couples' relationship functioning. The authors caution that their study may have had inadequate statistical power. They also note that only 6 of 21 women assigned to AFCT actually engaged their husband in couple therapy and these 6 couples completed and benefited from their therapy. This is not surprising, given that AFCT is usually studied when the alcoholic has already sought help, not as a method for engaging treatment resistant alcoholics.

Initiating Change in the Alcoholic

The 2003 review examined 4 methods with a primary goal of initiating change in the treatment resistant alcoholic in addition to helping the spouse or family member cope better. These include Unilateral Family Therapy, the Johnson Institute Intervention, Pressure to Change, and Community Reinforcement and Family Training (CRAFT).

Unilateral Family Therapy—Unilateral Family Therapy (UFT; Thomas et al, 1993) as reviewed in 2003 had limited empirical support, an extended 6-month course, and no treatment manual available. As such, UFT was judged not ready for replication or widespread use. No new studies of UFT have been done since the 2003 review.

Johnson Institute Intervention—The Johnson Institute Intervention, the popular family confrontation approach (Johnson, 1986), as reviewed in 2003 had shown a treatment engagement rate of 25–30% in 2 studies (Lipman et al, 1989; Miller et al, 1999). The reason for these disappointing findings is that most families who started the intervention process did not go through with the family confrontation meeting. The 2003 review suggested that until data show that this confrontational approach is effective in motivating treatment entry, treatment programs should consider using more effective alternative methods (see CRAFT below). No new studies of the Intervention approach have been done since the 2003 review.

Pressure to Change—The Pressure to Change approach, as reviewed in 2003, did better than wait-list control on initiating change in the drinker in 3 small randomized trials (Barber & Crisp, 1995; Barber & Gilbertson, 1996, 1998). However, the modest rate of treatment entry (31% across the 3 studies) is less than half of that obtained in the CRAFT studies. No new studies of this approach have been done since the 2003 review.

Community Reinforcement and Family Training—Community Reinforcement and Family Training (CRAFT; Smith & Meyers, 2004), as reviewed in 2003, had the strongest evidence base of methods to initiate change. Across 4 randomized trials (2 for alcoholics and 2 for drug abusers - Kirby et al. 1999; Meyers et al. 2002; Miller et al. 1999; Sisson & Azrin 1986), the average treatment engagement rate for CRAFT was 68% (range from 59%–86%) which was significantly and substantially higher than comparison groups of AI-Anon Facilitation Therapy or AI-Anon referral (0%–29%) or the Johnson intervention (22%). Thus, CRAFT was judged to be a more effective alternative to engage substance abusers in treatment than popular confrontational or detachment approaches.

One new study of the CRAFT approach has been done since the 2003 review. The Santa Fe County CRAFT Project (Dutcher et al., 2009) examined whether CRAFT could be successfully transferred from a controlled research setting to a community treatment center. Their study included liberal participant selection criteria and a wide range of family members, including a majority of mothers and spouses. Engagement rates of 55% – 65% were similar to those found in previous controlled studies suggesting that CRAFT could be successfully transferred to a community treatment agency.

Conclusions About MFT When the Alcoholic Is Unwilling to Seek Help

In terms of MFT to help the family when the alcoholic is unwilling to seek help, more studies of various methods to increase coping skills of family members have appeared since the 2003 review. These include more complete results (Hansson et al, 2004; Rychtarik & McGillicuddy, 2005) of 2 earlier studies along with 3 new studies (Copello et al, 2009; Halford et al, 2001; Son & Choi, 2010).

A major development at the time of the 2003 review was the first controlled studies of the 12-step family disease approach showing improvement in concerned others' individual functioning after AI-Anon Facilitation (AFT) or referral to AI-Anon. Although no further studies of AI-Anon have appeared since the earlier review, more complete results of the Rychtarik study (Rychtarik & McGillicuddy, 2005) suggest that AFT may be less effective than coping skills training when intimate partner violence (IPV) is involved. Specifically,

coping skills therapy led to less IPV than AFT in the year after treatment; and for spouses with a history of IPV, husbands' drinking improved in coping skills and worsened in AFT. Given the widespread use of AFT and AI-Anon, and the 50–65% past year prevalence of IPV among alcoholics (Stuart, O'Farrell & Temple, 2009), more research is needed to replicate potential differential effects of AFT and coping skills therapy when IPV is involved.

Similar to conclusions drawn in the 2003 review, all the MFT methods studied to date to help the family of the treatment resistant alcoholic have resulted in reduced emotional distress in the concerned others relative to baseline or a waitlist control group. At this time, stronger evidence is needed before we can conclude in favor of a particular approach. However, we can suggest the 3 approaches that seem most promising. All are manualized. All are products of careful development within a consistent, well-established conceptual framework. All have promising efficacy evidence in at least one controlled study. All need further research and clinical application. The first is Rychtarik's coping skills therapy. The second is AI-Anon Facilitation and referral to AI-Anon. The third is the 5-step coping skills intervention developed by Copello, Orford and their colleagues in the UK (Copello et al., 2009) for use in primary care settings.

In terms of MFT to initiate change when the alcoholic is unwilling to seek help, only one new study has appeared since the 2003 review. This is the CRAFT implementation study (Dutcher et al., 2009) which showed treatment engagement rates for CRAFT in a community treatment setting were comparable to those obtained in earlier well-controlled trials. This study supports CRAFT as a successful intervention for community-based use by a wide range of clinical providers. Consistent with conclusions from the 2003 review, continued research supports CRAFT as an effective method to engage alcoholics in treatment that is preferable to confrontational or detachment approaches. Replication of Dutcher et al.'s research is needed, but their initial study suggests that dissemination of CRAFT to community facilities is possible.

No new research on the Johnson Institute Intervention has appeared since the 2003 review. Therefore, consistent with conclusions of the 2003 review, we suggest that until data show that this confrontational approach is effective in motivating treatment entry, treatment programs should consider using more effective methods such as CRAFT. A Relational Sequence for Engagement (ARISE), an alternative method developed to overcome problems with the Intervention, has shown promise (Landau et al., 2004) but controlled studies are needed.

MFT TO AID RECOVERY WHEN THE ALCOHOLIC HAS SOUGHT HELP

The studies reviewed in this section evaluated treatment in which spouses or other family members of an alcoholic adult were involved in treatment efforts to aid the alcoholic's recovery and help the family after the alcoholic had sought treatment. As with the 2003 review, this section will focus on Behavioral Couples Therapy, Family Systems Therapy, and other MFT approaches. Building on the 2003 review, we examined whether new studies have addressed the recommendation of the earlier review. Specifically recommended were (a) studies evaluating MFT with a broader group of patients including women and minority patients, (b) studies of the transportability of evidence-based MFT approaches to clinical practice settings, and (c) studies of mechanisms and processes of change underlying MFT. We also examined new MFT studies that used expanded outcome domains (e.g., IPV, child functioning) as well as other studies including those with "negative results" showing MFT outcomes were not superior to comparison group outcomes.

Behavioral Couples Therapy

Behavioral couples therapy (BCT) sees the alcoholic patient together with the spouse or cohabiting partner to build support for abstinence and to improve relationship functioning. BCT assumes that spouses can reward abstinence, and that alcoholic patients from happier, more cohesive relationships with better communication have a lower risk of relapse. BCT has two main components: alcohol-focused interventions to directly build support for abstinence; and relationship-focused interventions to increase positive feelings, shared activities, and constructive communication. Two main BCT programs guide much of current research on BCT. The 2 BCT programs differ in their alcohol-focused interventions but are fairly similar in relationship-focused methods.

McCrary's Alcohol Behavioral Couple Therapy (ABCT) program uses a method called "alcohol-focused spouse involvement" (McCrary & Epstein, 2008; Noel & McCrary, 1993). It involves teaching the spouse specific skills to deal with alcohol-related situations. The spouse is taught how to reinforce abstinence, decrease behaviors that trigger drinking, decrease behaviors that protect the alcoholic from naturally occurring adverse consequences of drinking, assertively discuss concerns about drinking-related situations, and respond to help the drinker in drink refusal situations

The Counseling for Alcoholics' Marriages (CALM) Project BCT program (O'Farrell, 1993; O'Farrell & Fals-Stewart, 2006) uses a "recovery contract" as the main alcohol-focused method. In the CALM BCT recovery contract, the couple completes a daily "trust discussion" in which the patient states an intent to stay abstinent that day (in the tradition of one day at a time). The couple agrees not to discuss drinking or drug use at other times, to mark that they had the discussion on a calendar provided, and to end it with a statement of appreciation to each other. If disulfiram or another medication is part of the contract, it is taken during the trust discussion. If the recovery contract includes 12-step meetings, urine screens or other recovery supports, these also are marked on the calendar.

Evaluating BCT With A Broader Group of Patients

BCT with women alcoholic patients: Four studies of BCT with women alcoholic patients have appeared since the 2003 review at which time there were no such studies. McCrary and colleagues (McCrary, Epstein, Cook, Jensen & Hildebrandt, 2009) randomized 102 heterosexual alcoholic women to McCrary's alcohol behavioral couple therapy (ABCT) program or to alcohol behavioral individual therapy (ABIT). During 6 months of treatment, women increased their percentage of days abstinent and decreased their percentage of days of heavy drinking, with significantly greater improvements in ABCT than in ABIT. Differences favoring ABCT were maintained during the 12-month follow-up.

Fals-Stewart and colleagues (Fals-Stewart, Birchler & Kelley, 2006) randomized married or cohabiting female alcoholic patients (n = 138) and their non-substance-abusing male partners to 1 of 3 equally intensive interventions: (a) the CALM BCT program plus individual-based treatment (BCT), (b) individual-based treatment only (IBT), or (c) psychoeducational attention control treatment (PACT). During treatment, groups did not differ on drinking frequency, but BCT showed significantly more improvement in dyadic adjustment than IBT or PACT. During the 1-year follow-up, compared with those who received IBT or PACT, BCT had (a) fewer days of drinking, (b) fewer drinking-related negative consequences, (c) higher dyadic adjustment, and (d) reduced partner violence.

Schumm and colleagues (Schumm, O'Farrell & Muchowski, 2008) randomized married or cohabiting female alcoholic patients and their non-substance-abusing male partners to either of two equally intensive interventions: (a) the CALM BCT program plus individual-based treatment (BCT), or (b) individual-based treatment only (IBT). Results for 41 women to date

from this study in progress support the superiority of BCT over IBT. These preliminary results showed that women who received BCT maintained their abstinence during the 1-year follow-up better than those who received IBT.

Schumm and colleagues (Schumm, O'Farrell, Murphy & Fals-Stewart, 2009) conducted a naturalistic study of IPV before and in the first and second year after the CALM BCT program with disulfiram for 103 married or cohabiting alcoholic women, and used a demographically matched non-alcoholic comparison sample. IPV prevalence decreased significantly from 68% in the year before to 31% in the year after BCT, and remitted patients had 22% IPV prevalence which did not differ from the comparison sample. Results for the second year after BCT were similar to the first year. Thus IPV decreased after BCT, with remitted patients showing IPV reductions to the level of a non-alcoholic comparison sample. These findings replicate previous research among men with alcoholism.

Finally, when treating women alcoholic patients, as high as 40–60% of them may have a male partner with an alcohol or substance problem. These dual problem couples in which both the male and female member have a current alcohol or other substance use problem have typically been excluded from studies of BCT which relies heavily on support for abstinence from the partner. Two recent BCT studies have included some dual problem couples. First, in the McCrady et al (2009) study of BCT with women alcoholic patients reviewed above, 13% of the sample had male partners with a current alcohol use disorder. Given the small numbers, the impact of dual problem status on outcome was not examined. Second, O'Farrell et al (2008) included a select group of dual problem couples in which both members agreed to work together in BCT to pursue a goal of mutual abstinence. Results showed similar positive outcomes in terms of days abstinent for these dual problem couples in which both members wanted to change as for couples with only one alcoholic member. However, both of these studies had a very small number of select, presumably highly motivated male partners in the dual problem couples. Thus, studies are needed to test the efficacy of BCT with dual problem couples.

BCT with gay and lesbian alcoholic patients: Fals-Stewart and colleagues (Fals-Stewart, O'Farrell & Lam, 2009) randomized gay (n = 52) and lesbian (n = 48) patients with alcohol use disorder (AUD) and their non-substance-abusing same-sex relationship partners to equally intensive interventions consisting of (a) the CALM BCT program (BCT) plus individual-based treatment (IBT) or (b) IBT only. This study reported two separate trials, one with gay male participants and one with lesbian female participants. For both gay and lesbian patients with AUD, those who received BCT had a significantly lower percentage of heavy drinking days during the year after treatment than patients who received IBT only. In addition, both gay and lesbian couples who received BCT reported higher levels of relationship adjustment at the end of treatment and in the year after treatment than those who received IBT only. Thus, the response of gay and lesbian couples with an alcoholic member to BCT was consistent with what has been observed with heterosexual couples.

BCT for male alcoholic veterans with comorbid combat-related PTSD: Rotunda and colleagues (Rotunda, O'Farrell, Murphy & Babey, 2008) compared outcomes after the CALM BCT program with disulfiram for 19 dually-diagnosed patients with combat-related PTSD and a substance use disorder (SUD, primarily alcohol dependence) and 19 patients with SUD only. Both PTSD and non-PTSD patients showed good compliance with BCT, attending a high number of BCT sessions, taking disulfiram, and going to AA. Finally, both PTSD and non-PTSD groups improved from before BCT to immediately after and 12-months after BCT showing increased relationship satisfaction and reduced drinking. Extent and pattern of improvement over time were similar whether the patient had PTSD or not. Although the sample size is quite small and the study is not a randomized trial, the present

results suggest that BCT may have promise in treating patients with comorbid SUD and combat-related PTSD.

Increasing Transportability of BCT To Clinical Practice Settings—The 2003 review recommended studies of the transportability of evidence-based MFT approaches to clinical practice settings. BCT has a relatively strong evidence base among MFT approaches for treating alcoholism, but in 2003 no studies of transporting or disseminating BCT had appeared. This section describes an initial study which has successfully implemented BCT. We also have included in this section studies that, while not directly examining the dissemination process, attempt to overcome barriers to dissemination and implementation by decreasing cost to deliver BCT, expanding the pool of patients suitable for BCT, and developing new uses for BCT.

BCT implementation and dissemination: O'Farrell, Richard and el-Guebaly (2010) successfully transported the CALM BCT program from Boston where it has been researched to a community clinic in Calgary. On-site BCT training in Calgary was followed by telephone consultations biweekly for 6 months. A quasi-experimental evaluation compared outcomes of (a) 38 alcoholic patients who received BCT plus Treatment-as-Usual (TAU) with (b) 33 alcoholic patients who received TAU only. The latter group were referred to the BCT program but did not enter it due to logistics or refusal. At baseline the 2 groups were quite similar on demographics, substance use, relationship problems, and extent of comorbid mood or anxiety diagnoses. Results at 6-months follow-up showed patients treated in BCT, when compared to patients who got TAU only, had significantly more time abstinent from alcohol and drugs, higher scores on the Global Assessment of Relationship Functioning scale, and greater likelihood of staying together rather than being separated. Implementation of BCT was considered successful because BCT had better outcomes than individual-based TAU as expected from controlled trials of BCT, and because the BCT program in Calgary that began in 1998 continues to the present.

Brief BCT – brief treatment and cost-effectiveness: Fals-Stewart and colleagues (Fals-Stewart, Klostermann, Yates, O'Farrell & Birchler, 2005) examined the clinical efficacy and cost-effectiveness of 6-session brief relationship therapy (BRT), a shortened version of 12-session standard BCT (S-BCT), with alcoholic male patients (N = 100) and their nonsubstance-abusing female partners. Participants were randomized to: (a) BRT, (b) S-BCT, (c) individual-based treatment (IBT), or (d) psycho-educational attention control treatment (PACT). S-BCT and BRT patients had equivalent post-treatment and 12-month follow-up heavy drinking outcomes. At 12-month follow-up, heavy drinking and dyadic adjustment outcomes for BRT patients were superior to those of patients who received IBT or PACT. BRT was significantly more cost effective than S-BCT because BRT produced equivalent outcomes to S-BCT at lower cost.

Behavioral family counseling – BCT for non-spousal dyads: Many patients live with a family member other than a spouse. To expand the pool of patients suitable for BCT, O'Farrell and colleagues developed a Behavioral Family Counseling (BFC) intervention based on the CALM BCT program (O'Farrell, Murphy, Alter & Fals-Stewart, 2010). They randomized substance-dependent (mostly alcoholic) patients (N=29) living with an adult family member other than a spouse to equally intensive treatments consisting of either (a) BFC plus IBT or (b) IBT alone. BFC patients remained in treatment significantly longer than IBT patients. BFC patients improved significantly from baseline to 3- and 6-month follow-up on all outcomes studied, and had a medium effect size reflecting better primary outcomes of increased abstinence and reduced substance use than IBT patients. These pilot

study results show BFC is a promising method that merits further study in larger scale, controlled trials.

BCT to promote aftercare: Recent work on new uses for BCT was based on earlier successful use of a behavioral contract with a family member to reinforce aftercare attendance (Ahles, Schlundt, Prue & Rychtarik, 1983; Ossip-Klein, Vanlandingham, Prue & Rychtarik, 1984). O'Farrell and colleagues (O'Farrell, Murphy, Alter & Fals-Stewart, 2007, 2008a, 2008b) developed a brief family treatment (BFT) intervention for alcoholic patients in inpatient detoxification to promote aftercare treatment post-detox. BFT consisted of meeting with the patient and a family member with whom the patient lived to review aftercare plans for the patient. A phone conference was used when logistics prevented an in-person family meeting. Results showed that BFT patients were more likely than comparison group patients to enter a continuing care program after detoxification in a quasi-experimental (O'Farrell et al, 2007) and in a randomized study (O'Farrell et al., 2008a).

O'Farrell et al. (2008b) successfully transferred BFT to routine clinical practice after their research project ended. They trained a newly hired staff person to continue providing BFT. By monitoring key process benchmarks derived from the earlier research studies to ensure ongoing fidelity in delivering BFT, they ensured that a high proportion of patients had their families contacted and included in planning the patients' aftercare.

Mechanisms and Processes of Change Underlying BCT—The 2003 review recommended studies of mechanisms and processes of change underlying MFT because such studies had not appeared at the time of the earlier review. Thus, despite the fairly robust literature on the efficacy of MFT (especially BCT) in alcoholism treatment, little was known about the mechanisms underlying the effectiveness of BCT. Only limited progress has been made on this front. Conceptualizations of the possible mechanisms and two preliminary studies addressing this topic have appeared.

Conceptualizations of mechanisms of change underlying BCT: McCrady et al. (2009) described three major mechanisms for BCT's positive impact on drinking and relationship outcomes. First, BCT produces increases in the reinforcing qualities of the relationship that may provide greater incentives for continued abstinence. Second, BCT leads to greater partner support for change efforts. Third, improved conjoint problem solving around alcohol-related and other life problems may lead to improved outcomes.

Similar ideas come from a meta-analysis of controlled studies comparing BCT with IBT for alcoholic couples (Powers et al., 2008). BCT was superior to IBT on relationship adjustment at the end of treatment and at each time point thereafter during the follow-up period. On drinking outcomes, BCT and IBT did not differ at the end of treatment (with both treatments showing substantial improvement), but BCT did have more days abstinent at time points thereafter during the follow-up period. Powers et al concluded that "BCT appears to improve relationship satisfaction first that later leads to reduced drinking and drug use" (p. 961), thus explicating a potential theoretical mechanism of action of BCT, namely, improved relationship functioning. By reducing relationship distress (which is viewed as a major contributor to substance use and relapse) and promoting relationship behaviors conducive to abstinence (e.g., daily trust discussion, partner encouraging AA attendance), BCT builds relationship support for substance use reduction (O'Farrell & Fals-Stewart, 2006).

Preliminary studies of mechanisms of change underlying BCT: McCrady and colleagues (McCrady, Hayaki, Epstein & Hirsch, 2002) tested hypothesized predictors of change in BCT treatment for 68 male alcoholics. Results supported the hypothesized importance of

relationship functioning in drinking outcomes after BCT. In the 6 months after treatment, men's ability to remain abstinent was predicted by the quality of the pretreatment marital relationship, and the intensity of their drinking (i.e., drinks per drinking day) was predicted by the degree of their marital happiness immediately after treatment. Further, greater use of relationship-related skills during BCT was associated with less intense drinking if the men drank after treatment.

O'Farrell and colleagues (O'Farrell, Murphy, Stephan, Fals-Stewart & Murphy, 2004) examined IPV before and in the two years after BCT for 303 male alcoholic patients. (For details see section on IPV immediately below.) Structural equation modeling (SEM) was used to examine the mechanisms through which involvement in BCT was associated with IPV outcomes. SEM indicated that greater BCT treatment involvement (attending BCT sessions and using BCT-targeted behaviors) was related to lower violence in the 2 years after BCT. BCT-targeted behaviors consisted of Alcohol-focused BCT behaviors (e.g., daily verbal reinforcement of abstinence, and refraining from conflict about drinking) and Relationship-focused BCT behaviors (e.g., shared activities and constructive communication) targeted by BCT..

SEM mediation analyses further indicated the best model fit was obtained with the causal chain flowing from BCT involvement to improved relationship functioning, to reduced problem drinking, and then finally to reduced partner violence. "Thus, ... the most adequate fit to the data was provided by a model in which BCT treatment affects relationship functioning, which in turn affects problem drinking, which in turn affects partner violence" (O'Farrell et al., 2004, p. 213).

These two preliminary studies of mechanisms underlying BCT outcomes (McCrary et al., 2002; O'Farrell et al., 2004) both provide support for the hypothesized role of improved relationship adjustment and increased relationship support for drinking reduction. These results for BCT are encouraging because research often has not supported hypothesized active ingredients and mechanism of change for other evidence-based alcohol treatments (e.g., Longabaugh et al., 2005). However, both studies fall short of methods recommended for analyzing mechanisms of change in treatment outcome studies (Baron & Kenny, 1986; Holmbeck, 1997; Longabaugh & Wirtz, 2001). For example, neither study is a randomized trial, and the McCrary study did not conduct formal mediational analyses. Thus, although some preliminary work has been done, there continues to be a need for studies of mechanisms and processes of change underlying efficacious MFT methods.

BCT and IPV Outcomes—IPV is a major problem among alcoholic patients. Past year prevalence of IPV ranges from 50–65% for alcoholics seeking treatment with typical rates greater than 60% (O'Farrell et al, 2004; Schumm et al, 2009). The likelihood of male-to-female IPV among these patients is considerably higher on days of drinking or drug use compared with days of no use (Fals-Stewart, Golden & Schumacher, 2003). Since the 2003 review, studies of BCT for both male and female alcoholics have included naturalistic studies showing dramatic reductions in IPV after BCT, and randomized studies showing greater IPV reductions after BCT than after individual treatment.

Naturalistic studies of impact of BCT on IPV outcomes: O'Farrell et al. (2004) published complete results of a study that had been cited in the 2003 review based on unpublished data. This study examined IPV before and in the two years after the CALM BCT program with disulfiram for 303 married or cohabiting male alcoholic patients, and used a demographically matched non-alcoholic comparison sample. IPV prevalence decreased significantly from 60% in the year before to 24% in the year after BCT, and remitted patients had 12% IPV prevalence which was identical to the comparison sample. Results for

the second year after BCT were similar to the first year. Thus IPV decreased after BCT, with remitted patients showing clinically significant IPV reductions to the level of a non-alcoholic comparison sample.

Turning to IPV among women alcoholic patients, Schumm et al. (2009) conducted a naturalistic study of IPV before and in the first and second year after the CALM BCT program with disulfiram for 103 married or cohabiting alcoholic women, and used a demographically matched non-alcoholic comparison sample. IPV decreased after BCT, with remitted patients showing IPV reductions to the level of a non-alcoholic comparison sample, directly replicating findings for male alcoholic patients. (Section above on BCT with women alcoholic patients has more details on the Schumm et al. 2009 study.)

The findings of dramatically reduced IPV associated with abstinence after the CALM BCT program with disulfiram have been replicated in three naturalistic studies. These consist of 2 studies with male patients, the O'Farrell et al. (2004) study and an earlier study by O'Farrell and Murphy (1995), and the Schumm et al. (2009) study with female patients.

Randomized trials comparing IPV outcomes of BCT versus individual-based

treatment: The naturalistic studies of IPV reductions after BCT raise important questions. These studies have all included daily partner-observed disulfiram, raising the question of whether BCT without disulfiram would also reduce IPV. Given the relatively low usage of disulfiram in alcoholism treatment, this is important. Further, a naturalistic study cannot determine whether reductions in IPV observed are causally linked to BCT. Two randomized trials of the CALM BCT program without disulfiram, one with male and one with female patients, address these issues.

Among married or cohabiting male substance abusing patients (75% with a diagnosis of alcohol dependence), Fals-Stewart and Clinton-Sherrod (2009) randomized 207 men to either the CALM BCT program (without disulfiram) or individual-based treatment only (IBT). BCT had lower levels of IPV and substance use at 12-month follow-up than IBT. Moreover, treatment assignment was a significant moderator of the day-to-day relationship between substance use and IPV. Likelihood of male-to-female IPV on days of male partners' substance use was lower among couples who received BCT compared with IBT. This finding that BCT reduced risk of violence better than IBT on days of patients' substance use is important. It suggests that those who receive BCT do not have to rely solely on abstinence to be protected from IPV, which is good since relapse rates are high. Although the mechanism underlying this result was not examined, we speculate that methods taught in BCT protected women against IPV. Specifically, in BCT couples agree not to engage in angry touching and this agreement is reviewed at each BCT session. Also, if the patient relapses, women partners are taught not to argue with the patient when he is intoxicated, to use time-outs when conflicts escalate, to develop a safety plan if they felt threatened, and to avoid striking, pushing, or shoving out of frustration.

Turning to female alcoholic patients, Fals-Stewart et al. (2006) randomized married or cohabiting female alcoholic patients (n = 138) to (a) the CALM BCT program (without disulfiram), (b) individual-based treatment only (IBT), or (c) psychoeducational attention control treatment (PACT). Patients who received BCT versus those who received IBT or PACT reported fewer days containing episodes of IPV, in terms of both male-to-female and female-to-male IPV in the year after treatment. BCT also had better drinking and relationship outcomes that may have accounted for less IPV in BCT patients, but formal mediational analyses were not presented. (Section above on BCT with women alcoholic patients has more details on the Fals-Stewart et al. 2006 study.)

These two randomized trials are the first studies to show that BCT or any type of MFT is better than individual treatment at reducing the high levels of IPV among individuals seeking alcoholism treatment. More work is needed to understand the mechanisms underlying these results. Replication is needed of the finding that BCT produced lower risk than IBT of IPV on a day when the patient drinks.

BCT, Child Adjustment, and Parent Training—As noted in the 2003 review, Kelley and Fals-Stewart (2002) conducted the first study examining the impact of BCT on the children of alcoholic fathers undergoing BCT. Results showed that BCT improved children's functioning in the year after the parents' treatment more than did individual-based treatment or couple psychoeducation. Further, only BCT showed reduction in the number of children with clinically significant impairment.

The Kelley and Fals-Stewart results are important. Children living with parents whose alcoholism is severe enough to seek treatment have more serious adjustment problems than children from demographically similar homes without parental alcoholism (e.g., Burdzovic Andreas, O'Farrell & Fals-Stewart, 2006). The children may need help, but most parents who enter alcoholism treatment are reluctant to allow their children to be involved in any type of counseling (Fals-Stewart, Kelley, Fincham & Golden, 2004). Two new studies attempt to increase the benefits of BCT for children by identifying children who may benefit more from BCT and by adding parent training to BCT.

Kelley and Fals-Stewart (2007) examined whether BCT had greater benefits for preadolescent than for adolescent children of alcoholic fathers (N=131) who received BCT and were followed for a year after BCT. Results showed that the association between parents' functioning (i.e., fathers' sober days and parents' dyadic adjustment) and children's adjustment (as rated by mothers, fathers, and children's teachers) was stronger for preadolescents than for their adolescent siblings. Kelley and Fals-Stewart argue that BCT, which reduces paternal drinking and improves couple functioning, may serve as an important preventative intervention for preadolescents and a way to benefit these children without identifying or treating them directly. In contrast to younger children, adolescents who exhibit behavioral difficulties may need direct intervention to address problem behaviors.

Lam and colleagues (Lam, Fals-Stewart & Kelley, 2008, 2009) examined whether adding parent skills training to BCT for the alcoholic father had more benefits for the couple's preadolescent children. Their pilot study randomized 30 alcoholic fathers to equally intensive (a) parent training with BCT, (b) BCT (without parent training), or (c) individual treatment (without couples-based or parent skills interventions). Children did not attend therapy sessions. Parents completed measures of their own parenting and of child externalizing and internalizing behaviors at pretreatment, post-treatment, 6- and 12-month follow up; children completed self-reports of internalizing symptoms at each assessment. Because this was a small sample pilot study, analyses not only tested statistical significance. They also examined whether clinically meaningful effect sizes (i.e., $r \geq .20$) were observed for the magnitude of improvements and for the extent of differences between treatment conditions. Only parent training participants reported clinically meaningful (i.e., either statistically significant or met the effect-size cut-off) improvements on parenting practices and all child measures throughout the 12-month follow up. Further, parent training showed better child outcomes and more positive parenting practices than BCT or individual treatment alone, as indicated by the effect size cut-off. The very promising results observed for parent training plus BCT argue strongly for replication with a larger sample and explicit analyses testing hypothesized mediators of child outcomes.

Other Studies of BCT Including “Negative Results” Studies—McCrary and colleagues (McCrary, Epstein & Kahler, 2004) provided 18-month follow-up results for their study comparing methods to maintain change after alcohol behavioral couples therapy (ABCT; described at start of section on BCT above). They randomized 90 men with alcohol problems and their female partners to either (a) ABCT, (b) ABCT with relapse prevention techniques (RP/ABCT), or (c) ABCT with interventions encouraging Alcoholics Anonymous (AA) involvement (AA/ABCT). Couples were followed for 18 months after treatment. Across the 3 treatments, there were no differences in drinking or marital happiness outcomes between groups, contrary to the expectation that the two maintenance-enhanced treatments would yield better outcomes. Results at 6-month follow-up (McCrary, Epstein & Hirsch, 1999), which were included in the 2003 review, were similar to these 18-month follow-up results. However, the somewhat low follow-up completion rates (73% versus the current standard of 90%) may have affected results by retaining less severe patients in all 3 conditions, thus reducing the likelihood of finding group differences. Also, another study noted in the 2003 review found a main effect of more days abstinent for adding RP sessions to BCT, as well as a severity by treatment interaction such that alcoholics with more severe marital and drinking problems benefited more from the added RP sessions (O'Farrell, Choquette & Cutter, 1998).

Nattala et al (2010) randomized 90 male alcohol-dependent patients admitted for 3 weeks at an inpatient facility in India to either (a) dyadic relapse prevention (DRP), (b) individual relapse prevention (IRP), or (c) treatment as usual (TAU). In DRP, which was based on BCT treatment manuals from the U.S., both the patient and a family member (75% spouses) planned and rehearsed how the dyad could work together to prevent relapse. In IRP, intervention also focused on preventing relapse but only the individual patient took part. Participants had monthly follow-up visits to encourage progress (using methods consistent with the study treatment they received) and to collect outcome data for 6 months after discharge from the treatment center. Results for this 6-month period showed that DRP consistently performed better than TAU on all of the outcomes (reduction in quantity of alcohol, drinking days, and number of days with dysfunction in family, occupational, and financial dimensions). DRP participants also reported a significant reduction in the quantity of alcohol, drinking days, and family problems, compared with IRP. Study authors concluded that their findings provide evidence for the effectiveness of Western-based family oriented intervention for alcohol-dependent patients in India.

Vedel, Emmelkamp and Schippers (2008) conducted a randomized clinical trial comparing stand-alone BCT (n = 30; 10 45–60 minute sessions) with individual Cognitive-Behavioral Therapy (CBT; n = 34; 10 90 minute sessions) in community treatment centers for Dutch male and female alcoholics and their partners. Drinking and relationship functioning measures were collected at intake, post-treatment, and 6-month follow-up. Results showed both BCT and CBT significantly decreased drinking behavior from before to after treatment, but BCT was not found to be significantly better than CBT (although a small to medium effect size favored BCT over CBT). Marital satisfaction of the spouse increased significantly after treatment in BCT but not in CBT, with a large effect size favoring BCT over CBT. At 6-month follow-up, BCT and CBT did not differ on drinking or marital outcomes.

Study authors conclude: “Stand-alone BCT is as effective as CBT in terms of reduced drinking and ... more effective in terms of enhancing relationship satisfaction. However, BCT is a more costly intervention, given that treatment sessions lasted almost twice as long as individual CBT sessions” (Vedel et al., 2008, p. 280). The suggestion that BCT is less cost-effective than CBT is based on the 90-minute BCT sessions used in this study, whereas many other studies have used 50–60-minute BCT sessions (e.g., O'Farrell et al., 1998) the same as used for CBT. Further, the low follow-up completion rates (67–75%) may have

affected the results. The quality and fidelity of BCT in this study is not known because fidelity ratings were not provided. Addiction counselors may have delivered a higher quality CBT, the standard treatment in Dutch addiction centers, as compared to the newer BCT treatment with which they were less familiar. Finally, the BCT format studied is somewhat unclear given that the authors say they used both the CALM BCT method and McCrady's ABCT method, despite the fact that these two models have some important differences.

An Australian study described above (Halford et al. 2001) showed "negative results" for BCT. Alcohol-focused couple therapy (AFCT) based on the CALM BCT model was compared with supportive counseling or stress management for women whose husbands drank heavily but were not currently in alcohol treatment. All treatments eased the wife's emotional distress, but neither AFCT or the other treatments improved the man's drinking or the couple's relationship. The lack of impact of AFCT is not surprising when one considers that AFCT/ BCT has always been studied when the alcoholic has already sought help, not as a method for engaging treatment resistant alcoholics. The 6 of 21 women assigned to AFCT who actually engaged their husband in couple therapy completed this therapy and benefited from reduced drinking and happier relationships. This study suggests BCT may have limited usefulness when the alcoholic refuses to change or enter treatment with the spouse. In such cases, CRAFT to promote treatment or Al-Anon to help the family may be better options as already described above.

A study by Walitzer and Dermen (2004) has frequently been cited as showing "negative results" for BCT. This study randomized 64 male problem drinkers to 1 of 3 conditions: (a) drinking reduction treatment for problem drinkers only (PDO), (b) alcohol-focused spouse involvement (AFSI), or (c) AFSI + BCT focused on relationship enhancement. Drinkers whose spouses were included in treatment (i.e., AFSI and the AFSI + BCT conditions combined) evidenced fewer heavy drinking days and more abstinent/light drinking days in the year following treatment, relative to PDO clients. The combination of AFSI + BCT did no better than AFSI alone on these drinking outcomes. Treatment conditions did not differ on relationship satisfaction.

Based on these findings, some have concluded that "BCT did not work" in this study. This conclusion does not seem warranted when drinking outcomes are considered for two reasons. First, terminology should be considered. BCT for alcoholism has typically meant the combination of alcohol-focused interventions to support reduced drinking plus relationship-focused interventions to enhance relationship satisfaction. Walitzer used BCT to mean the relationship enhancement aspects of BCT only. Second, when the authors did supplementary analyses using separate pairwise contrasts between treatment conditions, they found significantly fewer heavy drinking days for AFSI + BCT than for PDO. This should be interpreted as "BCT works" in that BCT (with a combined focus on drinking reduction and relationship enhancement) produced better drinking outcomes than individual treatment.

However, the failure of BCT to enhance marital satisfaction is noteworthy. One explanation noted by study authors is that the couples in this study were not maritally distressed at baseline. The Walitzer study was different from other BCT studies in two ways, low severity alcohol problems and relatively satisfied relationships. It was the only BCT study that included only low severity alcohol problems (described as "early stage problem drinkers" with low levels of alcohol dependence, "not alcoholics"). Perhaps the safest conclusion is that the benefit of BCT with low severity problem drinkers (especially those with relatively satisfied relationships) has received little attention, and the Walitzer study raises questions as to whether its efficacy extends to this subgroup.

Family Systems Therapy

Family Systems Therapy (FST) has incorporated many core concepts of family systems theory into models of the alcoholic family system (Steinglass, Bennett, Wolin & Reiss, 1987; Rohrbaugh, Shoham, Spungen & Steinglass, 1995). Therapy focuses on the interactional rather than the individual level. FST uses a variety of techniques to affect interactions within the family. Greatest emphasis is put on identifying and altering family interaction patterns that are associated with problematic alcohol use. FST can be applied to couples therapy or whole family therapy.

FST has not been studied as extensively as some other approaches. The Couples Alcoholism Treatment (CAT) study (Shoham, Rohrbaugh, Stickle & Jacob, 1998), which was covered in the 2003 review, was a major outcome study of FST. The CAT study randomly assigned 75 alcoholic patients to 20 scheduled sessions over a 4- to 5-month period of either cognitive-behavioral couple therapy (CBT; Wakefield, Williams, Yost & Patterson, 1996) or family-systems couple therapy (FST; Rohrbaugh et al., 1995). Couples were followed for a 12-month follow-up period.

The first article on the CAT study (Shoham et al., 1998) examined retention in treatment for the 63 couples with a male alcoholic patient. Although they did not find main effect differences in retention between the two treatments, they did find an interesting moderator effect. Couples high on pretreatment measures of demand-withdraw interaction (a pattern in which the wife demands and the husband withdraws) attended fewer sessions and more often failed to complete CBT, whereas demand-withdraw interaction made little difference in FST. Shoham suggested that the alcoholic husband in such couples withdrew from a high-demand CBT therapy in the same way he tended to withdraw from a demanding wife. CBT in this study was “a high demand cognitive-behavioral therapy that focused primarily on the partners as individuals” and FST was “a low demand systemic treatment focused on the partners as a couple” (p. 572). Shoham acknowledged that the CBT used may not represent less demanding behavioral approaches such as motivational interviewing (Miller & Rollnick, 1991) or other BCT methods (e.g., Project CALM; Rotunda & O'Farrell, 1997). These intriguing findings merit further study. If replicated and extended to outcomes beyond retention in treatment, these results could have important implications for matching couples to treatments. Two new articles on the CAT study have appeared since the 2003 review.

In a second article from the CAT study, Karno, Beutler and Harwood (2002) found that patients treated in CBT had significantly better drinking outcomes than patients in FST during the 4- to 5-month treatment period. They further examined interactions between patient attributes and therapist interventions on drinking outcomes. Patients high in emotional distress did best when their therapy addressed emotional experiences, and the converse was observed for patients low in distress. Patients high in reactance had better drinking outcomes when their therapy was nondirective, and patients low in reactance improved more with directive therapy. In contrast to the interactions between patient attributes and the therapy process, the interactions between patient attributes and treatment model (CBT versus FST) were not reliable predictors of alcohol use. Limitations to the Karno et al (2002) results include (a) the measure of drinking outcome was a non-standard measure constructed for the study; (b) only 63% of the intent to treat sample (N=75) were included in the analyses due to extensive missing data; and (c) outcomes during the 12-month follow-up period were not examined.

In a third article from the CAT study, Kuenzler and Beutler (2003) examined whether FST or CBT couples alcohol treatment benefited patients' partners. They found that partners in FST reduced their alcohol use more than partners in CBT during the 4- to 5-month treatment period, while conversely partners in CBT improved their overall functioning (on the GAF

Axis V scale from the DSM-III-R, American Psychiatric Association, 1987) more than partners in FST. On self-rated psychiatric symptoms (Derogatis, 1983), FST and CBT did not differ and both showed little improvement. Further, aptitude by treatment interactions similar to those examined for patients by Karno et al (2002) did not produce significant results for partners' outcomes. Limitations include non-standard alcohol use measure and lack of follow-up results as already noted. Another concern is that only the subsample of partners (67% of the intent to treat sample of 75) who were drinking at intake were included in analyses.

Other MFT Approaches

The UK Alcohol Treatment Trial (UKATT, 2005a) was a large, multi-site, well-controlled randomized clinical trial that compared the effectiveness of social behavior and network therapy (SBNT), a new treatment for alcohol problems, with that of motivational enhancement therapy (MET) considered to be a proven therapy. Patients (N=742) with alcohol problems were assigned to treatment sessions over an 8–12 week period (3 MET sessions vs 8 SBNT sessions). Outcome data were collected at 3- and 12-months after study entry. Results showed that both groups reported statistically significant reductions in alcohol consumption, dependence, and problems, and better mental health related quality of life over 12 months. Between groups there was only one significant difference in outcome; the SBNT group showed significantly better physical health at three months. This one isolated difference was considered probably due to chance by study authors based on the number of statistical comparisons made. Cost analyses (UKATT, 2005b) showed that both therapies saved about 5 times as much in expenditure on health, social, and criminal justice services as they cost to deliver. Neither net savings or cost-effectiveness differed significantly between the two therapies. Also, the UKATT trial failed to find any patient-treatment matching effects (UKATT, 2007).

Considering overall results of the UKATT trial, study authors concluded that SBNT and MET were equally effective and equally cost-effective. They said “The combination of a sample size large enough to detect small differences and the lack of significant differences leads to positive conclusions about the value of both of these treatments for alcohol problems” (UKATT, 2005b, 549). They interpreted these findings as providing support for the effectiveness of SBNT, which they saw as performing as well as the established MET method. Notably, the UKATT trial is the first large scale effectiveness trial of an MFT-inspired intervention (i.e., SBNT). The results are encouraging as the authors note.

Caution should be exercised when considering the SBNT results. First, the authors did not report whether SBNT actually increased social network support for drinking change as planned. They also did not report if changes in social network were related to outcomes.

Second, a different interpretation of the UKATT findings is that neither treatment produced clinically significant improvements (Luty & Carnwath, 2008). Project MATCH (Project Match Research Group, 1997), the U.S. multisite trial on which UKATT was based, showed patients with 80–90% days abstinent at 3- and 12-month follow-up, whereas esponding data from UKATT were 43–46% days abstinent. Further, UKATT patients who drank consumed 18–19 drinks per drinking day at 3- and 12-month follow-up.

Third, based on other studies of MFT examined in the present review, it might have been expected that SBNT would have shown better outcomes than MET. SBNT aims to promote positive social support for a change in the patient's drinking behavior by involving network members in treatment sessions with the patient. A strength of SBNT is its flexibility in including a broader array of network members than partners and in allowing the therapist to pursue network support in varied ways. However, this SBNT flexibility may reduce the

consistency and concreteness of social support for drinking change that characterizes social support interventions that do show better outcomes than individual treatment. For example, as described above, BCT support for abstinence includes a daily trust discussion with the partner and tracking AA meetings attended on a calendar. In a further example, Litt and colleagues (Litt, Kadden, Kabela-Cormier & Petry, 2007) showed that a network support intervention (mainly encouraging and tracking AA attendance) increased support for patients' abstinence and led to better drinking outcomes than an individually-focused case management treatment.

Conclusions About MFT to Aid Recovery When the Alcoholic Has Sought Help

This section considers the current status of issues raised by the 2003 review. It also summarizes other key conclusions about the current state of outcome research on MFT to aid recovery when the alcoholic has sought help

First, the 2003 review recommended studies evaluating MFT with a broader group of patients including women and minority patients. Clear progress has been made on this recommendation. Four studies of BCT with women alcoholics have appeared since the 2003 review at which time there were no such studies. Three were randomized clinical trials (RCT) showing better drinking outcomes for BCT than for individual treatment (Fals-Stewart et al., 2006; McCrady et al., 2009; Schumm et al. 2008) and the fourth was a naturalistic study showing substantial reductions in IPV after BCT (Schumm et al., 2009). These 4 studies, which show a very similar pattern of results to those found for male alcoholics, come from 3 groups of investigators and use somewhat different BCT protocols, suggesting the findings are fairly robust. Two other studies are also relevant to this recommendation. An RCT showed for the first time that BCT produced better drinking and relationship outcomes for gay and lesbian alcoholics (Fals-Stewart et al., 2009). A small uncontrolled trial showed promising results for BCT with alcoholic male veterans with comorbid PTSD (Rotunda et al., 2008). However, studies of BCT or other MFT with minority group patients have not yet appeared in the literature.

Second, the 2003 review recommended studies of the transportability and dissemination of evidence-based MFT approaches to clinical practice settings. At the time of the 2003 review there were no such studies. Some initial progress has been made on this recommendation. An initial study (O'Farrell, Richard et al., 2010) transported the CALM BCT program to a community clinic in Calgary. Implementation of BCT was considered successful because BCT had better 6-month follow-up outcomes than individual-based TAU in a quasi-experimental evaluation, and because the BCT program in Calgary that began in 1998 continues to the present. Other studies attempted to overcome barriers to dissemination and implementation. To decrease the cost to deliver BCT, a brief 6-session BCT was developed that showed equivalent positive outcomes to the longer more costly 12-session version (Fals-Stewart, Klosterman et al, 2005). To expand the pool of patients suitable for BCT, it was adapted for use with family members other than spouses, and the resulting behavioral family counseling had better outcomes than individual treatment (O'Farrell, Murphy et al., 2010). To develop new uses for BCT, it was adapted to successfully promote aftercare post-detox (O'Farrell et al., 2007, 2008a, 2008b).

Third, the 2003 review recommended studies of mechanisms and processes of change underlying MFT. Only limited progress has been made on this front. Two preliminary studies of mechanisms underlying BCT outcomes (McCrady et al., 2002; O'Farrell et al., 2004) both provide support for the hypothesized role of improved relationship adjustment and increased relationship support for drinking reduction. However, both studies fall short of methods recommended for analyzing mechanisms of change in treatment outcome studies (Baron & Kenny, 1986; Holmbeck, 1997; Longabaugh & Wirtz, 2001).

Fourth, as noted in the 2003 review, BCT produces better primary outcomes of reduced drinking and increased relationship satisfaction than individual treatment. The BCT secondary outcomes of reduced IPV and improved child adjustment, which were introduced in the 2003 review, have been studied further in the interim. The findings of dramatically reduced IPV associated with abstinence after the CALM BCT program with disulfiram have been replicated with male alcoholic patients (O'Farrell et al., 2004) and extended to female patients (Schumm et al., 2009). Two randomized trials of the CALM BCT program without disulfiram, one with male (Fals-Stewart & Clinton-Sherrod, 2009) and one with female (Fals-Stewart et al., 2006) patients, found less IPV in the year after treatment for BCT than for individual treatment. Moreover, BCT reduced risk of IPV on days patients drank better than IBT, suggesting that those who receive BCT do not have to rely solely on abstinence to be protected from IPV, and possibly that BCT taught women how to prevent IPV when the husband drank (Fals-Stewart & Clinton-Sherrod, 2009). Improvements in child adjustment, as noted in the 2003 review, are greater after BCT than individual treatment (Kelley & Fals-Stewart, 2002); and BCT had greater benefits for preadolescent than for adolescent children (Kelley & Fals-Stewart, 2007). Building on these results, a pilot study showed that adding parent skills training to BCT for the alcoholic father had more benefits for the couple's preadolescent children than BCT alone (Lam, Fals-Stewart & Kelley, 2008, 2009), promising results that clearly merit replication.

Fifth, family systems therapy (FST) was the focus of 7 studies in the 2003 review, but there have been no new FST studies since then. New FST empirical papers have been limited to additional analyses of the Couples Alcoholism Treatment (CAT) study, which compared cognitive-behavioral couple therapy (CBT) with family-systems (FST) couple therapy. The first CAT study article (reviewed in 2003) reported that FST had better treatment retention than CBT for couples with more seriously disturbed communication patterns (Shoham et al., 1998). Additional CAT study articles reported that FST, compared with CBT, had less favorable patient drinking outcomes (Karno et al, 2002), greater reductions in partners' alcohol use, and less improvement in partners' overall functioning (Kuenzler & Beutler, 2003). Finally, Steinglass (2009) has creatively combined FST and motivational interviewing to provide a systemic-motivational model for treatment of alcoholism; controlled studies of this approach are needed.

FUTURE RESEARCH DIRECTIONS

This section suggests directions for future research. The following suggestions for future research are recommended.

1. Studies are needed that evaluate MFT with a broader group of patients. Although clear progress has been made in RCTs with women alcoholic patients, there have been no studies with samples that include a large proportion of minority group patients. There is also a need for research on MFT for couples in which both the male and female member have a current alcohol or other substance use problem. Also, research is needed to determine whether MFT improves treatment for problem drinkers as it does for alcoholism. Finally, alcoholic patients with substantial psychiatric comorbidity, such as PTSD or chronic mental illness (e.g. Mueser et al, 2009), have received little attention in the MFT literature and should be studied.
2. Studies are needed to investigate the transportability and dissemination of evidence-based MFT approaches to clinical practice settings. Although some initial progress has been made, there is a great deal of work to be done.

3. Studies of mechanisms and processes of change underlying effective MFT methods are needed. Only limited progress has been made on this front to date.
4. Studies are needed that expand outcome domains and interventions beyond the primary focus of reduced drinking and increased relationship satisfaction. Child adjustment and IPV are two “secondary outcomes” that need further attention. Related to child adjustment, studies are needed to replicate initial studies showing that child adjustment is improved after BCT, and that adding parent training to BCT improves child outcomes further than BCT alone. Related to IPV, studies are needed to replicate the finding of greater IPV reduction for BCT than individual treatment and to examine the treatment interventions and processes of change that protect a couple from IPV even when the patient is drinking.

A CLINICIAN RESPONDS

I am a practicing clinician and a clinical researcher. I was a clinician first, and a researcher second. In 1978, after working solely as a clinician for a few years, I established the Counseling for Alcoholics' Marriages (CALM) Project, known as Project CALM, at a VA substance abuse treatment program in the Boston area. Project CALM started as a research clinic to conduct outcome studies of behavioral couples therapy (BCT) for alcoholism and drug abuse. However, for the past decade or more, Project CALM has been a treatment program, not a site for outcome studies. In the Project CALM treatment program, we have applied what we learned in our earlier research studies in a clinically flexible manner.

Many believe that results from research studies do not hold up when new treatments are applied to routine clinical practice because research studies use carefully selected patients and have ideal conditions. However, this has not been our experience. BCT works well under routine clinical conditions when it is applied flexibly to meet any special needs of the patients or circumstances of the clinical setting. This has been our goal at Project CALM in recent years.

In the Project CALM treatment program, most patients who seek help are offered treatment with few exceptions (unlike the sometimes extensive exclusion criteria used in outcome studies). The BCT sessions couples receive typically include the core elements described in a BCT treatment manual (O'Farrell & Fals-Stewart, 2006). However, for experienced BCT therapists, the manual serves more as a reference guide than a session by session prescription. Therapists or trainees new to BCT are encouraged to follow the manual until they master it. The number of BCT sessions and the duration of treatment is determined flexibly based on the needs of each patient. Typically patients attend from 12 to 20 weekly conjoint BCT sessions followed by periodic check-ups or more extended relapse prevention sessions for as long as deemed clinically needed. It is not uncommon for patients with more severe problems to attend BCT and couples-based aftercare for a few years. The majority of patients attend AA or other 12-step meetings. Many patients also attend individual substance abuse or mental health counseling, usually delivered by counselors other than the person providing BCT. A sizeable minority of patients include recovery medication (e.g., acamprosate, disulfiram or naltrexone) as part of their BCT Recovery Contract. Psychotropic medications for comorbid mental health problems also are commonly used because many patients in this setting have complex comorbid psychiatric and medical problems.

MFT clinicians who wish to use evidence-based approaches in their work with alcoholic patients and their families will find some promising methods in this review. These approaches include Al-Anon facilitation and coping skills training to help families cope better, CRAFT to encourage alcoholics to enter treatment, and BCT to support abstinence

and repair relationships for alcoholics who have sought help. None of these approaches is currently in widespread use. To assist MFT practitioners with gaining further information, titles in the reference list that may be especially useful in describing these clinical methods have been marked with a double asterisk. One of the advances since the 2003 review is that detailed treatment manuals are now available for each of the MFT methods that has research support for use with alcoholics and their families. Specifically, these treatment manual citations are the following.

- Al-Anon facilitation (Nowinski, 1999)
- Coping skills training (Rychtarik, McGillicuddy & Duquette, 1995)
- Community Reinforcement and Family Training (CRAFT; Meyers & Wolfe, 2004; Smith & Meyers, 2004)
- Behavioral Couples Therapy (BCT; McCrady & Epstein, 2008; O'Farrell & Fals-Stewart, 2006)

How is a practicing MFT or an MFT student supposed to learn to do these evidence-based treatments for alcoholism? Can an MFT learn these treatments from a book? Training that is available in these approaches consists of isolated workshops, not a systematic, high quality, sustained training program or organization devoted to teaching and fostering implementation of these treatment methods. Although such programs and organizations exist for some adolescent family-involved substance abuse interventions for adolescents (see paper in this issue by Rowe and Liddle), they are not yet available for evidence-based MFT for alcoholism in adults.

Training in evidence-based approaches for MFT students and clinicians is needed. One obstacle is that the most appropriate venue for such training is not entirely clear. Should this training be done in MFT masters or doctoral programs that already have a full curriculum, or in specialized institutes or continuing education programs? Another obstacle is that three of the four evidence-based approaches (CRAFT, coping skills training, BCT) are behavioral approaches while the vast majority of MFT clinicians have strong training and allegiance to a family systems approach. Unfortunately, a family systems approach to treating alcoholism, while influential on a conceptual level, has not been formalized in a manualized treatment and shown in repeated empirical tests to be effective.

This paper has documented effective MFT approaches for use with alcoholics and their families. Studies of MFT to help the family and encourage the alcoholic to enter treatment may generalize well to MFT office practice. However, most studies of MFT to aid the alcoholic who has sought treatment were conducted in alcoholism treatment settings or in university-affiliated research clinics. None of the studies were done in MFT office practice settings, so we do not know if the results of the studies reviewed here would generalize to the typical practice of marriage and family therapists. In alcoholism treatment settings and in research projects focused on alcoholism, participants are aware that alcoholism will be addressed in the therapy. In such settings, participants have at least some recognition of the alcohol problem and at least tacit readiness to address the problem. In MFT practice, clients often do not recognize and may not be ready to address the alcohol problem. Therefore, the MFT approaches described in this paper may work in the MFT office practice setting only if clients have some readiness for changing the alcohol problem or if the MFT practitioner is able to help clients develop such problem recognition and readiness for change.

Acknowledgments

Preparation of this article was supported by a grant to the first author from the National Institute on Alcohol Abuse and Alcoholism (R01AA017865) and by the Department of Veterans Affairs.

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