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Concurrent Treatment of Substance Abuse, Child Neglect, Bipolar Disorder, Post-Traumatic Stress Disorder, and Domestic Violence: A Case Examination Involving Family Behavior Therapy

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Abstract

High rates of co-occurrence between substance abuse and child neglect have been well documented and especially difficult to treat. As a first step in developing a comprehensive evidence-based treatment for use in this population, the present case examination underscores Family Behavior Therapy (FBT) in the treatment of a mother who evidenced Substance Dependence, child neglect, Post-Traumatic Stress Disorder, Bipolar I Disorder, and domestic violence. Utilizing psychometrically validated self-report inventories and objective urinalysis, treatment was found to result in the cessation of substance use, lower risk of child maltreatment, improved parenting attitudes and practices, and reduced instances of violence in the home. The importance of utilizing validity scales in the assessment of referrals from child welfare settings is discussed, and future directions are reported in light of the results.

1 Theoretical and Research Basis

More than a half million children in the United States are estimated to be victims of child neglect, which is the most common form of child maltreatment (U.S. Department of Health and Human Services, 2006). Mothers who abuse substances are up to four times more likely to neglect their children (Cash & Wilke, 2003; Kelleher, Chaffin, Hollenberg, & Fischer, 1994). Indeed, Chaffin, Kelleher, and Hollenber (1996) conservatively found 21% of parents reported for child neglect abused substances, whereas other researchers have found between 50% and 80% of parents reported for child maltreatment abuse illicit drugs and alcohol (Barth, 1994; Murphy et al., 1991; Semidei, Radel, & Nolan, 2001).

Substance abusing mothers referred to child protective service agencies (CPS) face unique psychosocial problems. Indeed, as compared with nonsubstance abusing mothers referred to CPS, substance abusing mothers are younger, have more children, have greater financial problems, are more likely to have been referred by the criminal justice system or other providers, and are more likely to have been victims of abuse (Grella, Hser, & Huang, 2006). These women are also more likely to evidence difficulty maintaining stable housing, lack social support, and experience mood disorders (Hutchins & DiPietro, 1997; Kinsely, Barker, Ingersoll, & Dawson, 2000; Marcenko, Kemp, & Larson, 2000). Kerwin (2005) concluded that substance-abusing mothers are relatively deficient in their recognition of cues that

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The authors declared that they had no conflicts of interests with respect to their authorship or the publication of this article. However, Drs. Donohue and Allen would like to indicate that they have conducted training consultations in FBT for community agencies in the past.

warrant caretaking behaviors, and they experience problems relating to their children. In addition, Ammerman, Kolko, Kirisci, Blackson, and Dawes (1999) found that substance-abusing mothers are more likely to have impaired judgment and difficulty regulating their emotions with their children and adult significant others. They are likely to be resistant to treatment, and have low confidence in their ability to parent (Cash & Wilke, 2003; Kerwin, 2005).

There is a dearth of evidence based treatment programs available that have been developed in randomized controlled trials to effectively address both substance abuse and child maltreatment concurrently (Grella et al., 2006). For instance, in a study of parents reported for child neglect who attended mandated substance abuse treatment (Rittner & Dozier, 2000), parents were found to demonstrate low compliance and high attrition rates. Moreover, there were no significant differences in reabuse rates between treatment completers and treatment noncompleters. In a randomized controlled trial involving women who were mandated to treatment due to being identified for drug use during pregnancy, Mullins, Suarez, Ondersma, and Page (2004) found three sessions of Motivational Interviewing was no more effective than a control intervention (i.e., two educational videos and a home-visit) in lowering rates of treatment session attendance and drug use.

Programs that have been developed to address substance abuse and caretaking behaviors in mothers have produced mixed results. For instance, in well controlled trials, Schuler, Nair, and Black (2002) and Schuler, Nair, Black, and Kettinger (2000) found education-based community support protocols were ineffectual in reducing substance use, child abuse potential and poor maternal interactions, as compared with monthly contacts. However, in a nonrandomized study, Field et al. (1998) found that compared to control participants, adolescent mothers who received a school-based experimental program (i.e., educational, vocational, and parenting classes; social and drug rehabilitation; day care for infants while they attended school half-day) demonstrated decreased self-reported substance use and depression, better interaction with their infants, fewer repeat pregnancies, and better physical adjustment in their children, particularly 12 months post-baseline. The latter study demonstrates importance of comprehensive skill acquisition treatments in substance abusing mothers. Other outcome studies involving mothers who abuse drugs have demonstrated benefits (i.e., improved problem-solving skills, better ability to maintain household rules, less domestic conflict, and less heroin use) consequent to family skills training when combined with methadone maintenance programs (Catalano, Gainey, Fleming, Haggerty, & Johnson, 1999). Indeed, in the related area of domestic violence among substance abusing adults, behavioral therapies appear to be particularly effective (e.g., Fals-Stewart, Birchler, & Kelley, 2006; Fals-Stewart, Klostermann, Yates, O'Farrell, & Birchler, 2005; Fals-Stewart & Lam, 2008). A controlled trial conducted by Bellack, Bennett, Gearon, Brown, and Yang (2006) suggests comprehensive behavioral interventions are efficacious in dual diagnoses that often co-occur in substance abuse and dependence. In this study of substance dependent adults with severe comorbid *DSM-IV* disorders, Bellack et al. (2006) found a social skills program involving contingency management to be more effective in reducing drug use than a supportive control intervention.

Thus, treatments for substance dependent mothers who have been explicitly identified to maltreat their children are wanting, although some support does suggest these women may be responsive to comprehensive skill-based interventions (Donohue, Romero, & Hill, 2006). Along these lines, Family Behavior Therapy (FBT) is an evidence-based therapy that includes components to address many of the aforementioned problems (see reviews by Donohue, Allen, & Lapota, 2009; Donohue et al., in press). In this approach, substance use is conceptualized to be a strong positive reinforcer leading to pleasant physiological symptoms and social support. It is also negatively reinforcing, as it may be used to dampen

disturbing feelings, thoughts, and physical pain. Although substance use often leads to aversively perceived consequences, these consequences are often suppressed, distorted, or delayed, such that their association is weakened. Therefore, FBT is focused on altering the environment and skill set of those affected by drug abuse and dependence to effectively manage drug-associated stimuli, weaken positive associations between drug use and its inherent reinforcers, and reinforce behaviors associated with abstinence. Child maltreatment and other related problem behaviors are conceptualized along similar lines, and often maintained by distortions in thinking patterns that are influenced by the ill effects of intoxication and withdrawal. The present single case study examination highlights the administration of FBT in a mother who evidenced severe behavioral problems, including Substance Dependence, child neglect, Bipolar Disorder, Post-Traumatic Stress Disorder, perpetration and victimization of domestic violence.

2 Case Presentation

The client, Kendra, presented as a 27-year-old Caucasian female referred for in-home FBT by her caseworker at a CPS agency. She was given the option of participating in FBT or in the standard treatments provided by Child Protective Services, and her choice of therapy program did not in any way affect the disposition of her case. She selected to participate in FBT and before participating, she provided written informed consent. The study procedures were approved by the local institutional review board for the protection of human subjects.

At the time of the referral Kendra lived with her 34-year-old boyfriend, Roberto, and her two daughters, Diana and Rhiannon (ages 4 and 5, respectively). At the time of referral she was expecting her third child, and she was unemployed. Her boyfriend worked in the construction industry. However, at the time of treatment he was experiencing difficulty maintaining consistent employment. Although Roberto provided financial support for Kendra and her children, the family was experiencing difficulty paying ongoing bills and debts, including credit cards. Kendra also reported that she was unable to consistently purchase nutritious foods for her family. Both Kendra and Roberto had been incarcerated within 1 month of the time of referral for possession of illicit drugs, public intoxication, and perpetrating domestic violence. Specifically, while intoxicated Kendra began questioning Roberto about infidelity she believed occurred in the recent past, and the conversation escalated from verbal to physical aggression. Neighbors became concerned and called the police. In addition to this incident, she reported that her husband had been physically aggressive on numerous occasions, that is, slapped her, pushed her, and on several occasions hit her. They both engaged in verbal abuse and emotional abuse (i.e., belittled each other). In addition, her husband often made threats to leave and take the children as a form of control.

Kendra and Roberto were referred to County CPS because the aforementioned incident had occurred in front of their children, and they were therefore charged with child neglect. According to the caseworker’s report, Kendra became physically violent toward Roberto in front of their children while intoxicated. During the CPS investigation, she tested positive for cannabis and methamphetamine. She admitted to her caseworker that she had used substances, and that she had been both a perpetrator and victim of domestic violence. Kendra was instructed by her caseworker to participate in a treatment program to maintain custody of her children. During an initial telephone call to our FBT clinic, Kendra agreed she had a long history of problems managing aggressive behavior. When asked what she wanted to accomplish in therapy, she indicated that she was interested in abstaining from illicit drug and alcohol use and improving relationships within her family.

3 Presenting Complaints

In an unstructured interview, Kendra reported that she was raised by her mother and that she moved out of her mother's home as a teenager due to a contentious relationship. She reported that they disagreed about "everything" and that she never felt "accepted or wanted" by her mother. She also noted that her mother was not very involved in her life, and that there was a span of time in which they did not talk at all. Kendra had "cut off ties" with her mother after she suspected her mother and husband had an affair. Shortly prior to Kendra's referral to the FBT program she and her mother began "talking with each other again." She reported that her father had been absent most of her life, but had made attempts to establish a relationship with her a few weeks prior to the referral to the FBT program. She reportedly had no desire to have a relationship with him, and as a result she ignored her father's attempts to contact her. She drank alcohol for the first time when she was about 12 years old, and onset of her cannabis use occurred approximately 2 years later. Her earliest experiences with these substances occurred at parties, and subsequently generalized to various social events. It was about this time that Kendra began dating Roberto. She described their relationship was often focused on "getting high together," and that physical and verbal aggression were present from the beginning of the relationship. She dropped out of high school in tenth grade because she was "getting in a lot of fights" at school and reported that her use of illicit drugs decreased her motivation to attend school. She moved out from her mother's house when she was 18-years-old to live with Roberto. She reported their life together was stressful, but that they needed each other. She reported he also had a difficult family life, and that she had more contact with Roberto's family than her own. Kendra believed Roberto had been unfaithful on several occasions, and had often considered leaving the relationship. Kendra initiated methamphetamine and cocaine use in her early twenties. At the time of the referral, her children, Roberto, her in-laws, child's school, caseworker, and her child's physician were reportedly her support system. Her parents were "sometimes helpful," whereas her friends were reportedly "not helpful at all." Indeed, she reported most of her friends encouraged her to use drugs.

4 Pretreatment Assessment

A 3-hour assessment battery was administered in Kendra's home. Two trained technicians separately conducted the assessment methods with her and Roberto. The primary technician was responsible for the administration of informed consent, rationale for the assessment, and administration of measures. The second technician served in a supportive role, administering measures with Roberto, and assisted in managing the children.

Structured agendas were utilized to guide the administration of assessment measures that were selected from a standardized battery (for detailed description of preferred FBT assessment protocols see Allen, Donohue, Sutton, Haderlie, & LaPota, in press). Measures included (a) the Structured Clinical Interview for *DSM-IV* (SCID-IV) to determine presence or absence of *DSM IV* disorders (First, Spitzer, Gibbon, & Williams, 2002); (b) a urine drug test to assess presence or absence of recent illicit drug use (e.g., Amphetamine, Methamphetamine, Cocaine, Benzodiazapine, Barbiturates, Methadone, Phencyclidine, Opiates, Marijuana); (c) the Time Line Follow Back procedure to gather information about daily consumption of substance use and domestic violence (for full description of the method of defining domestic violence see Fals-Stewart, Birchler, & Kelley, 2003) during the 4 months prior to the time of assessment (Searles, Helzer, & Walker, 2000); and (d) the Life Satisfaction Scale (Donohue et al., 2003) to assesses Kendra's satisfaction in various areas of functioning. Measures specific to parenting and family environment included: (a) the Child Abuse Potential Inventory (CAPI) to assess attitudes and behaviors associated with child maltreatment (Milner, Murphy, Valle, & Tolliver, 1998); (b) the Adult-Adolescent

Parenting Inventory (AAPI) to assess parenting and childrearing attitudes (Bavolek, 1984); (c) the Parent Satisfaction with Child scale to assess Kendra's satisfaction with her child (modified from Donohue, DeCato, Azrin, & Teichner, 2001); (d) the Parenting Stress Index-Short Form (PSI) to assess Kendra's perceived stress in her role as a parent (Abidin, 1990; Milner et al., 1998); (e) the Cohesion and Conflict subscales of the Family Environment Scale (FES) to assess the extent to which Kendra experienced these factors in her family environment (Moos & Moos, 1984); and (f) the Home Safety and Beautification Checklist to assess the safety of the home environment (Donohue & Van Hasselt, 1999). A narrative summary of the pretreatment assessment results is provided in the following section, and the specific pretreatment scores are listed in Table 1.

Summary of Pretreatment Assessment Results

Consistent with her responses to the SCID-IV, Kendra was diagnosed with current Posttraumatic Stress Disorder, which first appeared when she was 14 years old. She reported that symptoms were related to childhood physical abuse and physical assaults by intimate partners during her adulthood. She was also diagnosed with Bipolar I Disorder, and was currently experiencing a Mixed Episode. She also was diagnosed with current Alcohol and Cannabis Dependence, and evidenced lifetime diagnoses of Cocaine and Stimulant Dependence. Kendra tested positive for cannabis on her urine drug screen at the time of the evaluation.

The Timeline Follow Back procedure was conducted with Kendra and her boyfriend separately. Kendra indicated that she used Methamphetamine 31 days, cannabis 70 days, and drank 56 days during the 120 days prior to referral. She also reported that domestic violence had occurred six times during this time period. Relative to her Kendra's reports, her boyfriend's scores indicated that she used less illicit drugs and alcohol and experienced less violence, although their scores were generally consistent.

On the Life Satisfaction scale Kendra indicated that she was 100% satisfied with her activities for fun and in her sex life and dating. She reported 80% satisfaction with her friendships, her appearance and overall satisfaction, and 50% satisfaction with her family, employment, and the amount of control she had about things that happened in her life. She was completely dissatisfied (0%) with her education, her ability to avoid substances, and her transportation options. Relatively high scores in friendships suggested she might have difficulties separating from them, which would ultimately be primary treatment goals as they were all reportedly chronic drug abusers.

Validity scales of the CAPI indicate Kendra approached testing in an open and honest manner. Her score on the Distress and Unhappiness scales of the CAPI, which are measures of personal adjustment problems and general unhappiness, were both elevated. Kendra's score on the Problems with Family scale suggested she was experiencing significant arguments within her family, and her Abuse score was very significantly elevated. Thus, her children were a significant risk for physical abuse or neglect, according to this measure.

On the AAPI Kendra obtained a score in the 50th percentile on the Appropriate Expectations scale, indicating Average understanding of developmental behaviors. She also scored in the 31st percentile in Values Alternatives to Corporal Punishment scale, indicating some difficulty in using alternatives to corporal punishment. On the Appropriate Family Roles scale, Kendra scored in the 31st percentile, suggesting some attitudes indicative of role-reversal or expecting children to care for adults in the family. She scored in the 16th percentile on the Empathic Awareness scale, reflecting significantly low ability to understand and value children's needs, fearing she might spoil them and that children must act good and right. Low scores on this scale are also associated with a lack of nurturing. On

the Valuing Children's Power and Independence subscale, Kendra score in the 2nd percentile, suggesting that she was restricting her children when they attempted to be independent. This score is also consistent with parents who expect strict obedience in their children, devalue negotiation and compromise as a means of problem-solving with them, and view independent thinking as disrespectful.

On the Parent Satisfaction with Child scale, Kendra rated extent of satisfaction with her children in various domains. On a scale from 0% to 100% satisfaction, she reported 100% satisfaction with their communication with her, their relationship with her, their participation in family activities, their participation in school and educational activities, their ability to stay safe, their reaction to her positive attention, and how they completed household chores. Kendra reported 80% satisfaction with their compliance to her requests, and their following household rules. Thus, she was reportedly very satisfied with the conduct of her children.

Relevant to the Parenting Stress Index-Short Form, her responses to the Defensive Responding scale were in the 85th percentile. This score suggests that Kendra may have been biased to present herself in a favorable manner. This suggests that her scores on this scale should be interpreted with caution, and that she may have been experiencing more stress than she self-reported. Kendra scored in the 60th percentile on the Total Stress Scale, which measures her overall stress with respect to her interactions with her children and their behaviors. Thus, her stress level was within normal limits. Kendra's responses to the Parent Child Dysfunction scale were in the Average range (i.e., 55th percentile). On the Difficult Child scale, Kendra scored in the 80th percentile. Thus, although this scale was not significant, given her significantly elevated Lie scale, it is very likely she was experiencing difficulties managing her children. Her scores on the Parental Distress scale were relatively low (i.e., 30th percentile), indicating low levels of distress in her role as a parent.

Kendra's scores on the Cohesion and Conflict subscales of the Family Environment Scale indicated that she experienced high levels of family conflict. She reported average levels of family cohesion. A tour of Kendra's home utilizing the Home Safety and Beautification checklist of common home hazards and cleanliness issues revealed several home hazards, including a broken window, absence of food representing the four food groups, and medications, cleaning detergents, pesticides, and electrical outlets that were all accessible to small children. There was an absence of home decorations, toys and books for children.

5 Case Conceptualization

Kendra's substance use was initiated when she was a young teenager. Her substances of choice during adolescence were alcohol and marijuana, which were primed by her friends at parties and "get-togethers," and positively reinforced with social support and the intoxicating effects of these substances. Her initial substance use was also negatively reinforcing, as symptoms associated with intoxication distracted her from various stressors (e.g., reprimands for poor performance in school by parents, dysfunctional family functioning marked with violence) and accompanying aversive emotional states (e.g., disappointment, anger, resentment). Her parents modeled the utility and acceptability of violence throughout her childhood. Along these lines, she witnessed her mother getting beaten by her father. Sometimes her mother would apologize, and her parents would "make-up" and tell Kendra everything was "fine." Other times her father would apologize subsequent to being victimized by verbal or physical assaults from his wife. Thus, she learned that violence could be repeatedly forgiven, and reinforced. Moreover, as postulated in Gerald Patterson's negative coercion theory, both of her parents were negatively reinforced to continue violence. It was aversive for her to remain in her parent's home and listen to them argue, thus she would spend time outside her home using substances in

unmonitored situations. With passage of time she became relatively desensitized to the ill effects of violence, and continued to use this coping method as an adult, especially during stressful times in her relationship with Roberto. She responded to aversive emotional states by taking substances to temporarily alleviate painful feelings. However, when the intoxicating effect of substances wore off, Kendra experienced feelings of guilt and remorse for behavior she evidenced during intoxication. Behaviors she regretted included aggression, verbal abuse, and child neglect. She had been arrested multiple times while intoxicated. Other negative consequences of her drug use included lack of trust from her family members, difficulties in her interpersonal relationships, decreased time spent caring for her children, and increased physical altercations with her significant other.

6 Course of Treatment and Assessment of Progress

Kendra, Roberto, and her children attended 16 FBT sessions in her home. Each session lasted approximately 90 minutes and was conducted once or twice per week. The treatment plan consisted of a battery of interventions that were administered successively and cumulatively based on Kendra's preferences. That is, the therapists administered each of the available interventions according to Kendra's preference. With the passage of time, treatments were added, but reviewed to a progressively lesser extent relative to their initial implementation. The primary behaviors targeted by each of these treatments are presented in Table 2. Her response to each of these interventions is summarized below.

Basic Necessities

Kendra was presented with a list of 12 potential emergencies, including adult-to-adult aggression or violence, adult-to-child aggression or violence, child-to-child aggression or violence, aggression or violence toward self, lack of food, illness or need for medical attention, bills due, unsanitary or unclean conditions in the home, difficulty obtaining needs from caseworker, sexual assault, custody issues, and court hearing at the start of each session. She was queried to indicate whether each of these items was imminent or present. Potential problems were solved utilizing Self Control (see review of this intervention below). Special attention was given to adult-to-adult aggression, adult-to-child aggression, home safety, and ability to pay bills because these emergencies had previously occurred in her home. For most of the treatment sessions, she did not endorse any of these items. However, during session 10, Kendra indicated that that adult to adult aggression might soon occur. Kendra informed her therapists that she and Roberto had been fighting all day. The argument occurred subsequent to Kendra and Roberto watching a movie in which a man was unfaithful to his partner. Kendra believed Roberto had an affair a few years ago, and this led to an emotionally laden argument. Kendra stated that she wanted to end her relationship with Roberto, and he immediately became very upset and verbally aggressive, protesting that the accusations were false. The session became an emergency session focused on ensuring safety in the family. The therapists separated the two adults by asking Roberto to go outside to calm down, and he agreed to do so. One therapist took the children into their room so they would not witness the argument. The other therapist attempted to brainstorm alternative options with Kendra in a neutral manner. Prompts from the therapist assisted Kendra in determining three options (i.e., the relationship could continue, it could end, or the couple could temporarily separate). The positive and negative consequences of each option were explored. Kendra decided to stay in the relationship, and stated that she wanted to spend more time learning how to control her negative thinking patterns. Roberto re-entered the room, Kendra apologized for her behavior, and the couple reconciled. Communication guidelines were established between Kendra and Roberto to assist in managing potential arguments in the future.

Behavioral Goal Setting and Contingency Management

This intervention involved querying Kendra to determine which goals she wished to target in therapy from a list of potential options. Goals were focused on decreasing risk of HIV, abstaining from illicit drugs and alcohol, and enhancing her parenting behaviors. Kendra established and updated goals relevant to decreasing violent behaviors decreasing substance use, and increasing parenting skills. During this intervention Kendra received rewards from her significant other each week she completed her goals. Kendra accomplished a lengthy list of self generated goals, including buying healthier foods for her children, refraining from sexual activities when her children could possibly witness them, effectively managing her children, avoiding people who use drugs, keeping drug paraphernalia out of the house, avoiding verbal arguments with significant other in front of children, avoiding any kind of yelling an swearing in front of children, learning new ways to handle stress, learning to deal with anxiety, managing difficult memories, and learning to communicate effectively. Kendra tended to set one or two items as focus goals each week and actively attempted her goals 90% of the time. Roberto successfully provided Kendra rewards for achieving her goals, and within several sessions was able to restrict unearned reinforcement.

Stimulus Control

Stimulus Control was used to teach Kendra how to identify safe and at-risk situations. In this intervention, she learned to identify and avoid people, places, and situations that put her at-risk to use substances, to contract HIV, and to have difficulty parenting her children. At the start of treatment, Kendra did not have a clear understanding of her drug use “triggers” (antecedent stimuli). First, therapists asked Kendra and Roberto to list as many people, places, and situations that preceded Kendra’s substance use in the past. Next, Kendra was prompted to create a list of people, places, and situations not associated with Kendra’s substance use. This included things she had not done but wanted to, and things she had not been able to do in a longtime. Every week therapists reviewed this list to assess: (1) how she was able to stay clean in risky situations, and (2) how she was able to increase time spent in safe situations. In the beginning of treatment she spent a considerable amount of time with people on her at risk list. Although it was difficult, she eventually ceased having contact with almost every person on her at-risk list. For the people, places, and situations she could not avoid, she was trained to use some of the other interventions such as Self Control to manage and eliminate her drug urges (see below for description).

Home Safety and Beautification

Home Safety and Beautification was completed to assure her home was safe and stimulating for her children. In this intervention therapists and the family toured her home, identified safety issues and home hazards, and established safety plans. This intervention was introduced in the third treatment session. The first time the home tour was conducted, Kendra expressed concern about the home tour. She stated that during the pretreatment assessment the assessor requested to go through their drawers and she felt this was “inappropriate.” After the therapists listened and empathized with her concerns, Kendra gave the therapist permission for the home tour to continue. The home tour revealed a number of home health hazards. Areas of concern included lack of healthful foods, holes in the carpet, uncovered outlets, exposed wires, accessible knifes, missing drawers in kitchen with sharp edges exposed, an improperly functioning toilet, shaving razors in accessible locations, a front door that did not lock properly, and toxins that were accessible. Both Kendra and her therapists generated and implemented solutions in sessions four and five. By session seven, all of the high priority items and the majority of lower priority items were addressed, and all home hazards were eliminated.

Family Communication

The Communication modules aim to improve family communication and relationships. The "I've Got a Great Family" module helps increase positive statements between family members by prompting family members to tell other family members what they love, admire, or respect about each other. The "Positive Request" module teaches family members how to make positive requests of each other. Therapists introduced "I've Got a Great Family" to Kendra in sessions six and seven. Kendra stated that she understood how the modules would benefit her family. However, she and Roberto were initially hesitant to participate in role plays. After a brief statement about the rationale for utilizing role-plays, Kendra complied. However, Roberto did not. He chose to leave the room for the remainder of the session. At the end of the session therapists informed Kendra and Roberto that role plays were necessary in future sessions. In Session 8, Kendra told Roberto what she loved, admired, and respected about him. Roberto was very touched by what Kendra said and cried. He stated that he felt making such positive statements more regularly would be extremely beneficial for his family. In this session, therapists introduced "Positive Request." Kendra became more active in role plays and was eager to show therapists her ability to make positive requests. She shifted from having to be encouraged to participate in treatment exercises to actively seeking help and skills. This change endured for the remaining treatment sessions. In future sessions both Kendra and Roberto complied with the role plays and their communication with one another became significantly more positive, reinforcing them to spend more time together in drug incompatible family activities that benefitted their children.

Child Management

Child Management modules were utilized to help Kendra to be more consistent in her disciplinary methods and to improve her children's compliance to her requests. In Session 12, therapists introduced "Catch My Child Being Good." In this session, Kendra learned to reward her children when they were behaving well by giving them attention, teaching them, playing with them, showing affection, and praising them. She also learned how to ignore undesired behaviors. In Session 13, the therapists reviewed "Child Compliance Training." This module provides instructions on how to administer appropriate consequences when children refuse to comply with parental requests. In Session 14, Kendra learned "Positive Practice." In this procedure, the parent is taught through role-playing to provide the child an excuse when undesired behavior occurs, and to then instruct the child to practice the desired behavior. Throughout the child management modules, Kendra was extremely eager to learn new parenting strategies and was highly compliant in session, including active participation in role plays and in vivo trials. Therapists noted significant improvement in Kendra's ability to make positive statements to her children, to discipline them, and to teach her children desirable behaviors. In Session 15, she reported that her children had consistently been more compliant since she started using these parenting techniques, and particularly liked the in vivo practice that occurred during treatment sessions.

Financial Planning

A Financial Planning module was used in Session 15 to address Kendra's goal of more effectively managing and organizing her finances. Kendra was taught to list all sources of income and expenditures. The therapist brainstormed methods of decreasing expenditures and increasing income. She utilized these skills to better prepare payments, and she initiated the establishment of a savings account. She also reported that these new skills decreased stress in her family. Although FBT usually includes a "job getting" skills training component, this method was not utilized in this case due to her ability to sustain employment after FBT was implemented (perhaps due to enhanced motivation and renewed focus on the importance of maintaining ongoing income).

Post Treatment Assessment and Results

Kendra and her husband completed an in-home assessment immediately after treatment. The post-treatment battery included the same measures as the pretreatment assessment. The assessment technicians were blind to the previous assessment results, her course of treatment, and the features of FBT. A narrative summary of the pretreatment assessment results is provided in the following section, and the specific post-treatment scores are listed in Table 1 next to the pretreatment scores.

There are some indications that Kendra was responding to testing prompts in a defensive manner. For instance, she told the therapist the urinalysis was unnecessary because she was no longer in treatment. Other indications of a defensive response bias include clinically significant elevations on validity scales of the CAPI and the PSI (the PSI was also elevated at Pretreatment Assessment). These elevations are discussed further below.

Upon termination from treatment Kendra reported no current symptoms on disorders assessed by the SCID-IV. Thus she did not report current Post Traumatic Stress Disorder Symptoms or Bipolar I Disorder symptoms that had been endorsed at preassessment. She also did not endorse symptoms of Alcohol or Cannabis Dependence, which were also present at pretreatment assessment. The urine drug screen was negative for all substances. On the Time Line Follow Back, Kendra reported that in the 120 days prior to post-treatment assessment she had 1 day of alcohol use (56 days at pretreatment assessment). Her days of using marijuana reportedly dropped from 70 days at pretreatment assessment to zero during the 120 days post treatment assessment, and 31 days of Methamphetamine at pretreatment assessment to zero days during the 120 days prior to post-treatment assessment. Her urinalysis drug screen was negative for all substances tested. Instances of domestic violence decreased from six to zero.

On the Life Satisfaction Scale, Kendra reported greater satisfaction with her life in all domains at post-treatment. Her ratings rose drastically from 0% to 100% satisfied in Education, Ability to Avoid Substances, Ability to Avoid Alcohol, and Availability of Transportation. Her ratings of Family, Employment, and Control of What Happens in Life rose from 50% to 100% satisfied. Her rating rose from 80% to 100% satisfied in Friendships, Appearance, and Overall Satisfaction.

All of Kendra's CAPI scores were improved at post-treatment. On the Lie subscale, which was developed to detect a pattern of responses biased to be socially acceptable, Kendra scored 12, which is above the cut-off score of 8. This suggests she may have been under reporting problematic parenting attitudes or practices, and possibly on other measures collected at post assessment. The Abuse scale is a composite of other factor scores that measures the degree to which a respondent's response pattern matches that of a person who has likely maltreated a child. The score on this scale dropped dramatically at post-treatment, and was no longer elevated. This suggests a significant overall reduction in the likelihood of child maltreatment. The Distress factor scale, which measures personal adjustment problems, decreased significantly to below the cut-off level. In addition, Kendra's score on the Problems with Family factor scale, which represents difficulties in the familial relationship score decreased dramatically. This would be indicative of an improved familial relationship. Kendra's score on the Unhappiness scale, which measures general unhappiness with life and difficulties in relationships, had also decreased dramatically below the cut-off, suggesting Kendra was considerably happier upon termination from treatment.

On the AAPI, Kendra's score in Empathy Toward the Needs of Children scale improved considerably, from the 16th to the 50th percentile. This suggests that she had a greater understanding of her children's developmental needs, which she valued and understood her

children's needs more, and that she was more able to nurture her children and encourage positive growth. Her score on Values Alternatives to Corporal Punishment increased from the 31st to the 50th percentile, suggesting an increase in valuing and using alternatives to physical punishment. Kendra's score on Power-Independence also increased slightly, suggesting that she was more accepting of her children's ability to problem solve and make choices independently.

On the Parenting Stress Index–Short Form, Defensive Responding remained High, suggesting Kendra responded in a defensive manner at post-treatment (as well as pretreatment assessment). Nevertheless, Kendra's Total Stress score rose from the 60th percentile to the 78th percentile. Although this post treatment score is not clinically significant, the increase suggests higher overall stress in parenting, which may have been influenced by the avoidance of many of her drug using friends (i.e., withdrawal of their support). Her Parental Distress rose from the 30th percentile to the 65th percentile, suggesting that she felt more stress in her role as a parent. Parent–Child Dysfunction rose from the 55th percentile to the 85th percentile, suggesting that at post assessment Kendra experienced the relationship with her child as below her expectations. Kendra's Difficult Child score, which reflects unmanageable behaviors dropped from the 80th percentile to the 55th percentile. These shifts in percentile scores suggest that Kendra was experiencing relatively more perceived stress in her role as a parent, but acknowledged that her child was less difficult to manage. Thus, her attempts to implement novel parenting strategies throughout treatment appeared to increase her awareness of appropriate parenting strategies, and may have contributed to anxiety regarding her ability to implement these strategies effectively. It is also possible that interpersonal stress may have been exacerbated as a result of greater contact with Roberto and her mother.

A comparison of Kendra's pretreatment and post-treatment responses on the Family Environment Scale indicated that she experienced a greater degree of commitment, help and support from family members and less frequently expressed anger and conflict.

At post-treatment the family was no longer living in the home that was rated at pretreatment. In contrast to pretreatment, only minor safety risks were present at post-treatment. Risks found at post-treatment were worn appliances, a hole in the wall by the door, and two broken cabinet drawers. It was also noted that there were light bulbs absent, and the bed was unmade.

Summary Comparison of Pretreatment and Post-Treatment Assessments

At post-treatment Kendra had reported a complete cessation of substance use and domestic violence, as well as a drastic reduction in alcohol consumption. She appeared to have better understanding of, and more empathy for, the needs of her children. It appears as though conflict in the family decreased significantly, and that cohesion increased. She also demonstrated greater ability to maintain a safe home for her children. Results on the CAPI suggest a significantly lower potential for abuse, even though parenting stress may have increased. Overall, it appears that at post-treatment Kendra was able to maintain sobriety, had developed positive parenting attitudes, and was better able to maintain a safe home and family environment for her children. However, the validity scales also suggest she may have attempted to present herself in a favorable manner. Nevertheless, objective urinalysis testing results were negative at the post treatment, and it should be mentioned that her PSI Defensive Responding score was also elevated at pretreatment assessment, suggesting improvements in various problem behaviors may have occurred, but perhaps not to the extent she reported. Finally, with regard to psychiatric diagnosis, at the end of treatment she no longer met *DSM-IV* criteria for current post traumatic stress disorder, alcohol dependence, or cannabis dependence. In addition, while continuing to have a lifetime

diagnosis of bipolar I disorder, at the end of treatment she no longer met criteria for a current major depressive episode.

7 Complicating Factors

Concurrent drug dependence and domestic violence is a serious and complex issue that is often not addressed in child welfare (Cleaver, Nicholson, Tarr, & Cleaver, 2007). Indeed, many of the alternative treatment programs in Kendra's community do not accept referrals when domestic violence is indicated, and those that do are usually not evidence-based, and are often ill equipped to treat coexisting mental health related problems. Thus, caseworkers, similar to those in Kendra's community, sometimes have the difficult task of economically accomplishing an appropriate treatment plan for domestic violence while avoiding duplication of services. In FBT, therapists attempt to treat the antecedents of domestic violence through communication skills training, anger management, problem-solving, self-control, contingency management, and pleasant activities scheduling. Such skills appeared to help Kendra and Roberto communicate more effectively, and improve areas in their relationship that had previously caused them to argue (e.g., parenting more competently, decrease drug use, increase the rate of pleasant family activities, improve home safety and beautification), thus decreasing antecedents to violence. Therapists also carefully monitor potential emergencies or cues that have historically led to domestic violence, and instruct clients to resolve these potentially dangerous situations utilizing problem-solving procedures during "Basic Necessities" or "Stimulus Control." The emergency session that was previously described in this article addressed domestic violence by teaching Kendra and Roberto to calmly resolve disputes that often signaled violent actions.

Another complicating factor concerns confidentiality. Indeed, in most cases of child maltreatment, the referral is obligated to participate in a treatment program, and therapists are usually requested to provide a treatment summary to the referring agency. Clients thus have an inherent bias to present themselves favorably, both at pretreatment to avoid potential mandates to participate in comprehensive services and post-treatment to assure successful termination from treatment. Kendra's elevated validity scores suggest she may have experienced these concerns. Thus, it is important to examine objective data, whenever possible, when considering appropriate treatment termination, such as urinalysis testing, behavioral observations of session behavior (e.g., homework completion, participation in role-playing, positive interactions with children, attendance, and promptness to sessions), and home observations. In Kendra's case, it appears that she may have denied problems in her self-reported measures. However, objective data seemed to indicate improvements for Kendra and Roberto from pretreatment to post-treatment.

8 Treatment Implications of the Case

This case illustrates how a standardized, evidenced-based treatment can be effective in a "realworld" complicated case. While evidence-based treatments (EBTs) are found to be more effective than less studied and structured treatments (Weisz, Jensen-Doss, & Hawley, 2006), there is debate among mental health practitioners about the effectiveness and feasibility of implementing EBTs in clinical populations treated in community settings (Kazdin, 2008b). This case suggests that FBT can appropriately and flexibly assist clients who evidence multiple diagnoses and problems, as this client evidenced comorbid substance dependence and several co occurring *DSM-IV* disorders and problem behaviors. FBT was able to address co-occurring problems through a comprehensive set of modules that designed to ameliorate problems in multiple domains of functioning. Symptoms of posttraumatic stress disorder (PTSD) and Bipolar Disorder were significantly reduced, although they were not explicitly targeted. It is believed these changes occurred because

underlying issues associated with both of these disorders were targeted in treatment. For instance, Kendra learned to target antecedents to stress and depression in “Stimulus Control,” she learned to make assertive “Positive Requests” to increase reinforcement from others, she learned to problem-solve potential emergencies, make her home more stimulating and aesthetically pleasing, schedule pleasant family activities, and effectively manage finances.

Specific to PTSD and Bipolar Disorder, the client was taught a number of skills that may have helped her manage her symptoms. To manage her mood, she was taught to monitor and control her environment such that she avoided antecedent stimuli and increased pleasurable experiences and relationships. She also was taught impulse control skills in “Self Control,” and was overall experiencing a greater sense of self-efficacy at the end of treatment. Her mood may have also stabilized as a result of cessation of alcohol and substance use. With regard to the decrease in PTSD symptoms, Kendra was taught in successive trials to identify and manage early triggers to drug use and child neglect, such as those associated with violence and upset that sometimes led her to re-experience traumatic events. These trials helped her to confront these experiences, and consequently manage them under her own control.

Development of the relationship between the client and her therapists is also noteworthy. Some detractors of evidence-based treatment have commented that standardized structure and focus on symptoms (as opposed to a focus on the client as a person or the process of therapy) jeopardize the therapeutic alliance and are difficult to juggle in community-referred clients. Along these lines, Roberto and Kendra were both initially hesitant to participate in role-plays. Indeed, the significant other protested his reluctance to perform a role-play by abruptly leaving the room. However, the therapists persevered and found that as a result of the role plays, Roberto was able to make an important request that the family communicate how they love one another more often. Kendra, who also initially resisted role-plays, ultimately sought to practice more role-plays in session, and improve her communication and parenting skills. Maintaining adherence to protocol was facilitated by therapists’ increasing the frequency of praise when family members were adherent, ignoring self-derogatory statements expressed by family members prior to role-play initiation, utilizing written agendas with estimates of the amount of time each intervention would require prior to role-play initiation so clients could be reminded of these limits when they were tangential, providing encouragement, stating the respective skills to be modeled would be difficult prior to initiating the role-plays, and eliminating critique during the initial role-plays.

9 Recommendations to Clinicians and Students

One of the most important challenges mental health care providers face in child welfare settings is a lack of evidence-supported services for underserved populations (Gully, Price, & Johnson, 2008; Kazdin, 2008a). It is clear that effective interventions are sorely needed for substance-abusing mothers reported for child neglect, and that any intervention administered must address barriers to treatment, such as lack of transportation, lack of employment, dangerous living conditions, and lack of social support and community resources. Results of this case examination suggest FBT appears to be an evidence-based treatment with great promise in effectively addressing problems that often co-occur with substance dependence, such as domestic violence, child neglect, and severe mental health pathology. This case trial also suggests that manualized treatment can be effective in chaotic “real-world” environments. Along these lines, therapists in this case examination were relatively inexperienced, as one of the therapists was an undergraduate with no prior clinical experience, and the other was a non-licensed professional who had not yet obtained her master’s degree in clinical psychology. Thus, FBT is likely to offer an evidence-based

alternative to inexperienced mental health providers in community care settings where drug dependence and severe mental health ailments often present.

Another interesting point concerns the practicality of FBT in community settings. For instance, social workers often refer cases like the one reviewed in this examination to several agencies (i.e., vocational assistance, drug abuse treatment, mental health counseling, parenting groups). Of course, such referrals are designed to assure the identified problem behaviors are sufficiently addressed. However, this practice is costly, it is often difficult for such clients to maintain several programs each week, and it often leads to redundancy of care and contradictions in treatment planning. Thus, the examined FBT in this case presentation may be a cost-effective alternative to multiple referrals. When cases are less complicated, FBT may be dismantled to enhance its feasibility. That is, one therapist can initiate sessions, clients and therapists can mutually select only the most relevant therapy components, the number of sessions can be reduced, and therapy can be implemented in an outpatient setting as it was originally developed.

Nevertheless, there is much controlled work to be done in determining the definitive effectiveness of FBT, and other evidence-based treatments, in underserved complicated populations within child welfare. In our earlier trials involving FBT (Azrin, Donohue, Besalel, Kogan, & Acierno, 1994; Azrin et al., 1996, 2001; Azrin, McMahon et al., 1994; Donohue et al., 1998), we attempted to utilize relatively lax study exclusionary criteria to assist us in developing behavioral therapies capable of accommodating “real world” problems evidenced in severely affected substance abusing populations. However, as we prepare FBT for effectiveness trials in child maltreatment, our experiences indicate treatments will need to be even more flexible to accommodate a very wide array of disorders and functional problem behaviors. The anecdotal results of this case examination offer promise along these lines, but emphasize the need to conduct controlled trials with follow-up assessments in substance abusing caregivers identified to maltreat their children.

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Table I

Summary of FBT Intervention Components[a]

FBT Intervention Components	Brief Summary
Basic necessities	Monitoring emergencies, and problem-solving solutions when they are determined to be present or soon to occur.
Behavioral goals & contingency management	Establishing structured goals targeting antecedents to problem behaviors, and arranging contingent reinforcement from significant others when these goals are accomplished.
Treatment planning Stimulus control	Assisting clients in prioritization of FBT intervention components. Identifying, and assisting clients in the withdrawal and avoidance of antecedent stimuli to problem behavior.
Self control	A series of imaginal trials focused on teaching clients to identify early antecedents of problem behavior, generate negative consequences to these consequences, relax, generate solutions, imagine performance of chosen solutions, and imagine reinforcement for desired behaviors.
Home safety & beautification tours	Touring home to assist family in identification of home hazards, and methods of enhancing beauty of home (developed from the original work of Lutzker and colleagues' in Project 12 Ways and SafeCare).
Communication skills training	"I've Got a Great Family" (Reciprocity Awareness) involves instructing family members to exchange things that are loved, admired and respected about one another. Positive Request involves family members being taught to make appropriate requests of one-another (developed from Azrin and his colleagues' work in reciprocity counseling).
Child management skills training	"Catching My Child Being Good" teaches parents to attend to their children, reinforce desired behaviors, and ignore undesired behaviors (developed from the child management strategies of Hanf, Forehand and colleagues). Positive Practice teaches parents to blame undesired behavior of children on the environment and practice alternative desired behaviors. Compliance Training teaches parents to provide appropriate directives, warnings for noncompliance, and consequences for noncompliance (developed from the child management strategies of Forehand, Hanf and their colleagues).
Financial management	Determining financial deficits and surpluses, and brainstorming methods of generating increased income and reducing deficits.
Job getting skills training (not administered in this case examination).	Teaches individuals to solicit and perform well in job interviews, and obtain gainful employment (originally developed as part of Azrin's job club).
Child-focused interventions (not administered in this case examination)	Three interventions are designed to assist children in becoming more reinforcing to their parents, including "Catching My Parent Being Good," (differential reinforcement of parents),"Why I'm Special Show" (children show off their desired behaviors in talent shows for their parents), "Offering to Help My Parents" (children learn how to offer help to their parents).

FBT = family behavior therapy.

[a]Problem behaviors often include drug use, HIV risk behaviors (e.g., unprotected sex), child neglect, domestic violence, negative emotions (e.g., anger), posttraumatic experiences.

Table 2

Summary of Assessment Results

Measure	Pretreatment	Post-Treatment
Child abuse potential inventory raw scores (cut-off scores in parentheses after subscale)		
Abuse potential (>215)	288[a]	54
Problems with family (>18)	32[a]	0
Distress (> 152)	190[a]	28
Unhappiness (>23)	26[a]	5
Problems with family (>18)	32[a]	0
Problems with child and self (>11)	1	1
Rigidity (>30)	23	20
Lie (>8)	3	12[a]
Adult-adolescent parenting inventory percentile scores (1 SD ≤ 16%)		
Appropriate expectations	50	50
Empathy toward the needs of children	16[a]	50
Values alternatives to corporal punishment	31	50
Appropriate family roles	31	31
Values independence	2[a]	7[a]
Parent stress index percentile scores (1 SD ≥ 85%)		
Difficult child	80	55
Defensive responding	85[a]	90[a]
Parental distress	30	65
Parental child dysfunction	55	85[a]
Total stress	60	78
Family environment scale t-scores		
Conflict (cut-off ≥60)	65[a]	33
Cohesion (cut-off ≤40)	59	65
Parent satisfaction with child scale (percent satisfaction reported)		
Communication	100	100
Relationship with parent	100	100
Family involvement	100	100
School activities	100	100
Safety skills	100	100
Reaction positive attention	100	100
Reaction negative attention	90	80
Compliance	80	70
Following rules	80	80
Household chores	100	100
Timeline follow back (during 120 days previous to assessment date)		
Days of methamphetamine use	31[a]	0

Measure	Pretreatment	Post-Treatment
Days of marijuana use	70[a]	0
Days of alcohol use	56[a]	1
Incidents of domestic violence	6[a]	0
Specific drugs testing positive at either post or follow-up urinalysis testing		
Cannabis	Present	Absent
Life satisfaction scale (percent satisfaction reported)		
Friendship	80	100
Family	50[a]	100
Things I do for fun	100	100
Appearance	80	100
Sex/dating	100	100
Substances	0[a]	100
Alcohol	0[a]	100
Transportation	0[a]	100
Control in life	50[a]	100
Overall satisfaction	80	100
Current mental health diagnoses present as per SCID (requisite criteria met in past 4 mos.)		
Post-traumatic stress disorder	Present[a]	Not present
Bipolar I disorder: Major depressive episode	Present[a]	Not present
Alcohol dependence	Present[a]	Not present
Cannabis dependence	Present[a]	Not present

SCID = structured clinical interview for *DSM-IV.*

[a]Indicates the respective score is associated with clinical significance.