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Assessing fidelity to evidence-based practices in usual care: The example of family therapy for adolescent behavior problems

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ABSTRACT

This study describes a multimethod evaluation of treatment fidelity to the family therapy (FT) approach demonstrated by front-line therapists in a community behavioral health clinic that utilized FT as its routine standard of care. Study cases ($N = 50$) were adolescents with conduct and/or substance use problems randomly assigned to routine family therapy (RFT) or to a treatment-as-usual clinic not aligned with the FT approach (TAU). Observational analyses showed that RFT therapists consistently achieved a level of adherence to core FT techniques comparable to the adherence benchmark established during an efficacy trial of a research-based FT. Analyses of therapist-report measures found that compared to TAU, RFT demonstrated strong adherence to FT and differentiation from three other evidence-based practices: cognitive-behavioral therapy, motivational interviewing, and drug counseling. Implications for rigorous fidelity assessments of evidence-based practices in usual care settings are discussed.

1. Introduction

The goal of this study was to determine whether a community clinic that featured family therapy (FT) as its routine standard of care demonstrated fidelity to the FT approach when treating adolescent behavior problems, utilizing assessment methods that appear well-suited for efficient fidelity evaluation in usual care. Treatment fidelity is an index of the degree to which interventions are delivered in accordance with essential theoretical and procedural aspects of a given model (Hogue et al., 1998). Fidelity consists of three related components (Waltz, Addis, Koerner, & Jacobson, 1993): *adherence* refers to the quantity or extent to which interventions are delivered; *competence* refers to the quality or skill of delivery; and *differentiation* refers to the degree to which comparative treatment approaches differ from one another in practice based on guiding theory and prescribed interventions. Whereas the past decade has witnessed noteworthy gains in the knowledge base and technology base of fidelity evaluation in controlled research settings, parallel efforts in usual care settings have been slow in coming (Schoenwald et al., 2011).

1.1. Family therapy for adolescent behavior problems

Family therapy has matured into an empirically supported treatment approach for adolescent behavior problems (ABPs) that include conduct problems, delinquency, and substance misuse. Specific manualized FT models that have proven efficacious for ABPs include brief structural family therapy, functional family therapy, multidimensional family therapy, and multisystemic therapy (for reviews see Henggeler & Sheidow, 2012; Waldron & Turner, 2008). Although these FT models differ from one another along several dimensions of treatment focus (e.g., systemic versus behavioral) and service delivery (e.g., office-based versus home-based), they all endorse two treatment foci based on their common grounding in the FT approach: (1) emphasis on core FT intervention techniques for ABPs (for review of relevant fidelity and process research see Hogue & Liddle, 2009), which include but are not limited to: convening multiple family members in most sessions; creating a family-focused reframe of the referring problem and specifying treatment goals that are family-based; working to bring about in-session change in family interaction patterns intended to restructure problematic relationships, increase interpersonal attachments and communication, and improve family problem-solving; and working to improve parenting behaviors; and (2) an "ecological" orientation tailored to ABP youth that entails active intervention in extrafamilial systems (school, peer, community, and juvenile justice) within which adolescents demonstrate clinical and developmental problems (Becker & Curry, 2008; Henggeler & Sheidow, 2012).

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FT models for ABPs have accumulated a robust portfolio of treatment outcome effects across the adolescent behavioral health spectrum, with strong efficacy and effectiveness results for conduct and substance use problems in clinical samples (for a meta-analytic review see Baldwin, Christian, Berkeljon, Shadish, & Bean, 2012). Moreover, FT process-outcome studies have demonstrated links between adherence to core FT techniques and improvements in adolescent and family functioning as well as in-session changes in parenting practices and family interactions (Hogue & Liddle, 2009). These and related findings underscore the empirical validity of the FT approach for ABPs and its potential suitability as a first-line treatment option for multiproblem adolescents in outpatient behavioral care.

1.2. Family therapy fidelity evaluation in usual care

To date the bulk of implementation and outcome evaluations of FT for ABPs has been conducted in controlled conditions, either as clinical trials in research settings or as effectiveness studies in community clinics that benefited from intensive training and oversight by model experts. Unfortunately, little is known about the fidelity and potency of FT when implemented in standard treatment conditions, that is, as an evidence-based practice supported by routine supervisory and administrative resources in usual care (UC) (Kaslow, Broth, Smith, & Collins, 2012). The term "evidence-based practice" (EBP) refers broadly to intervention techniques, models, or approaches that, having been originally validated in controlled research contexts, are implemented by front-line providers in the course of everyday clinical care (McHugh & Barlow, 2010).

The current study evaluated both adherence and differentiation of FT as practiced by community therapists in UC. For treatment differentiation purposes, we compared the degree to which study therapists used FT techniques to their use of treatment techniques derived from three alternative approaches for ABPs: cognitive-behavioral therapy (CBT), motivational interviewing (MI), and drug counseling (DC). These three non-FT approaches were selected for comparison because (1) they each have a substantial base of empirical support for addressing ABPs (Becker & Curry, 2008; Chorpita et al., 2011; Eyberg, Nelson, & Boggs, 2008; Winters, Stinchfield, Latimer, & Lee, 2007; Winters, Stinchfield, Opland, Weller, & Latimer, 2000); (2) they are all widely endorsed in UC settings for treating ABP youth; and (3) like FT, CBT and MI boast several manualized treatment models that have proven efficacious for a range of ABPs (see Hogue & Liddle, 2009; Miller & Rose, 2009; Waldron & Turner, 2008), making them ideal candidates to serve as transdiagnostic interventions capable of treating the heterogeneous, multiple-disorder populations typical in front-line settings (Garland, Bickman, & Chorpita, 2010; McHugh, Murray, & Barlow, 2009). Note that these four approaches are not intended to represent wholly discrete, non-overlapping EBPs. In research settings, MI and CBT are commonly packaged as a unified multicomponent treatment for ABPs (e.g., Dennis et al., 2004), and FT models are frequently combined with CBT and/or contain behaviorally oriented interventions characteristic of the CBT approach (e.g., Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998; Waldron & Turner, 2008).

1.3. Challenges and solutions to evaluating treatment fidelity in usual care

Assessment methods that can effectively and efficiently assess treatment fidelity in UC are urgently needed to advance EBP dissemination efforts (Schoenwald et al., 2011). Field-based evaluation of EBPs delivered in UC is complicated by several features of routine practice that present stiff challenges to rigorous implementation assessment, including the use of eclectic intervention approaches and techniques by community therapists, heterogeneous client pools, and limited resources and expertise for conducting fidelity evaluations (Garland, Hurlburt, Brookman-Frazee, Taylor, & Accurso, 2010). To overcome such challenges Garland, Hurlburt, and Hawley (2006) recommend that UC implementation studies employ a "hybrid" assessment design that targets traditional aspects of psychotherapy process research (e.g., dose, fidelity, therapeutic relationship) but also emphasizes field-flexible assessment strategies and strong collaboration with community providers to develop context-sensitive evaluation tools.

Two resource-efficient evaluation methods provide an excellent fit for hybrid implementation assessment in UC: benchmarking analyses and collection of therapist self-report data. Benchmarking studies typically compare the performance of community providers to accepted gold standards (i.e., benchmarks) in critical areas such as retention, implementation, and outcomes (Hunsley & Lee, 2007). By examining how EBP implementation in UC compares to fidelity standards achieved in controlled research on empirically supported treatments, benchmarking analyses can play a pivotal role in discovering whether evidence-based treatments and practice elements are feasible, potent, and durable when delivered in UC (Hogue, Ozechowski, Robbins, & Waldron, in press).

Also, whereas observational assessment of treatment implementation remains the gold standard for fidelity research even in UC settings (Garland, Bickman, et al., 2010), it is critical to develop reliable complements or even alternatives to observational methods that are cost-effective and easy to use by non-researchers in clinical practice. The most promising method is therapist self-report measures, which offer several advantages over observational ratings (Carroll, Nich, & Rounsaville, 1998; Weersing, Weisz, & Donenberg, 2002), among them: they are quick, inexpensive, and non-intrusive; and they can be completed throughout treatment, facilitating evaluation of infrequent but clinically meaningful interventions. As described below in Section 2.4, we developed a new therapist-report measure of EBP implementation for ABPs based on focus group feedback from the six UC treatment sites in which the study was conducted.

1.4. Study hypotheses

We used a three-phase evaluation design to assess fidelity to the FT approach in usual care for ABP youth. Study participants were randomly assigned to one of two conditions: (1) *routine family therapy* (*RFT*): a single clinic that featured FT as its routine standard of care; or (2) *treatment as usual* (*TAU*): one of five clinics in the same catchment area that were not specifically aligned with the FT approach. We predicted that RFT would demonstrate basic adherence to FT treatment techniques and also basic differentiation from alternative EBPs featured in TAU: CBT, MI, and DC. There were three specific hypotheses: (1) FT adherence levels achieved by RFT therapists would be comparable to benchmark FT adherence levels established by research therapists in a controlled trial of an empirically supported FT model for ABPs (multidimensional family therapy; Liddle, Dakof, Turner, Henderson, & Greenbaum, 2008); (2) RFT therapists would report a higher overall level of allegiance and skill in FT techniques compared to non-FT techniques, and also, their FT allegiance and skill levels would be higher than those reported by TAU therapists; (3) RFT therapists would report stronger adherence to FT techniques than to techniques associated with the three alternative EBPs, and also, they would report a higher FT adherence level than that reported by TAU therapists. The final hypothesis is a flexible application of treatment differentiation analyses suitable for hybrid process