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Shorter communication

Feasibility of two modes of treatment delivery for child anxiety in primary care

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ABSTRACT

In this study, we examine the feasibility of cognitive behavior therapy (CBT) for children with anxiety in primary care, using two modes of treatment delivery. A total of 48 parents and youth (8–13) with anxiety disorders were randomly assigned to receive 10-sessions of CBT either delivered by a child anxiety specialist in the primary care clinic or implemented by the parent with therapist support by telephone (i.e., face-to-face or therapist-supported bibliotherapy). Feasibility outcomes including satisfaction, barriers to treatment participation, safety, and dropout were assessed. Independent evaluators, blind to treatment condition, administered the Anxiety Disorders Interview Schedule for Children (ADIS) and the Clinical Global Impression of Improvement (CGI-I) at baseline, post-treatment and 3-month follow-up; clinical self-report questionnaires were also administered. Findings revealed high satisfaction, low endorsement of barriers, low drop out rates, and no adverse events across the two modalities. According to the CGI-I, 58.3%–75% of participants were considered responders (i.e., much or very much improved) at the various time points. Similar patterns were found for remission from "primary anxiety disorder" and "all anxiety disorders" as defined by the ADIS. Clinically significant improvement was seen on the various parent and child self-report measures of anxiety. Findings suggest that both therapy modalities are feasible and associated with significant treatment gains in the primary care setting. (clinicaltrials.gov unique identifier: NCT00769925).

Child anxiety disorders are common but frequently go undetected and untreated. Although much of the child primary care literature has focused on detecting and treating behavior problems (Reiff & Stein, 2003), epidemiologic findings reveal that anxiety disorders are also common in this setting (lifetime prevalence = 6.6–17%) (Busch et al., 2002). Despite the remarkable prevalence of anxiety disorders and their associated impact, in a primary care sample, only 31% of children with a DSM-IV anxiety disorder had received mental health services compared to 40% of children with past-year depressive disorders and 70% of children with ADHD (Chavira, Stein, Bailey, & Stein, 2004). The primary care pediatrician's practice, with its potential for access, emphasis on developmental assessment, and its frequently cited status as a de facto mental health service (Regier, Goldberg, & Taube, 1978) represents a viable setting for the detection and possible treatment of children with anxiety disorders. Treating children in primary care also comes with the added advantages of lessening stigma due to seeking services in a medical setting rather than a mental health clinic, increasing patient comfort and trust, and facilitating communication between mental health and medical providers (Asarnow, Jaycox, & Anderson, 2002; Weersing & Walker, 2008). Given the positioning of primary care as a front-line service for children with mental health problems, studies examining the feasibility and effectiveness of evidence-based interventions in primary care are necessary.

To our knowledge, three randomized controlled trials (RCT) for child anxiety have been conducted in the primary care setting. These studies have included Cognitive Behavior Therapy (CBT) for children with anxiety and comorbid physical complaints delivered by mental health specialists (Warner et al., 2011), CBT for disruptive behavior and emotional problems delivered by nurses (Kolko,

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Campo, Kelleher, & Cheng, 2010), and a telephone based CBT approach for children with mild-moderate disruptive behavior and anxiety disorders (McGrath et al., 2011) delivered by para-professionals. In this latter study, telephone sessions were focused on self-help material review, skill modeling, problem solving around presenting issues, and skill implementation. Findings from these studies have mostly been positive with response rates ranging from 45 to 65%.

Bibliotherapy, which relies on self-administration of an intervention, represents a more minimal contact approach that can address important barriers to treatment such as access, transportation, time, childcare, and convenience and may be useful for stepped models of care seen in primary care settings. At present, there is a small RCT literature supporting the use of child anxiety bibliotherapy approaches, which are parent guided, and include varying levels of therapist support. In those RCTs that have included bibliotherapy supplemented by therapist-initiated telephone calls, response rates have ranged from 45 to 79% (Cobham, 2012; Creswell et al., 2010; Leong, Cobham, de Groot, & McDermott, 2009; Lyneham & Rapee, 2006). Delivery which has relied on email or parent initiated contact has resulted in less favorable outcomes (i.e., approximately 30% response). In an RCT and feasibility trial of parent-guided CBT, which included self-help materials, four telephone contacts, and four face-to-face sessions, response rates have ranged from 34 to 55% (Creswell et al., 2010; Thirlwall et al., 2013). Most of these studies have been conducted in specialty clinics with patients recruited from various sources, with the exception of Creswell et al., which was based in primary care and relied on pediatrician and self-referral. Overall, findings suggest that therapist-supported bibliotherapy and other minimal contact methods can be feasibly delivered to families with significant treatment gains. Findings also suggest that families may not have to come to a clinic to benefit from evidence-based interventions (Cobham, 2012).

In the current study, we build upon this existing literature by examining the feasibility of two modalities of CBT for child anxiety delivered to families in the primary care setting. The first modality was a standard individual therapy approach where a mental health specialist met with the parent and child in the primary care clinic for weekly sessions. The second modality, was therapist-supported, parent implemented CBT (i.e., therapist-supported bibliotherapy), where all therapist contact occurred by telephone. We examine whether these modalities can be feasibly delivered in the primary care setting, with a particular focus on issues of satisfaction, acceptability, barriers to treatment, safety, and attrition.

Method

Participants and procedure

A total of 48 parents and youth (ages 8–13 years) with anxiety disorders participated in this study. Baseline characteristics are presented in Table 1.

Families were recruited from three primary care clinics through physician or self-referral. Recruitment materials included brochures, flyers, and signs describing the CBT program, which were posted in waiting areas and all clinic exam rooms. Parent informed consent and assent from the child were obtained at the baseline assessment visit. All procedures were approved by the appropriate Institutional Review Boards. Inclusion/Exclusion: Children between the ages of 8–13 years, who could speak English (as well as their parents) and had a primary diagnosis of social anxiety disorder, separation anxiety disorder, obsessive compulsive disorder, specific phobia, and/or generalized anxiety disorder based on the ADIS, were eligible to participate. Children receiving psychotropic medication were also included; medication dose was required to be stable for at least 3 months prior to study entry and for the duration of the study. Comorbid conditions were permitted provided they were not the child's predominant (i.e., primary) diagnosis. All parents gave permission for the primary care providers to be a part of the intervention, which included pediatrician notification about child's participation in the study and treatment progress.

Table 1
Baseline parent and child characteristics.

	All *n* (%)	FF *n* (%)	TSB *n* (%)	*p* value
Child Age, mean (SD), y	48	$M = 9.75$, SD = 1.7	$M = 9.50$, SD = 1.6	.61
Parent Age, mean (SD), y	48	$M = 41.69$, SD = 5.44	$M = 42.31$, SD = 3.18	.70
Female	27 (56.3)	14 (58.3)	13 (54.2)	.77
Ethnicity				.22
Caucasian	35 (72.9)	20 (83.3)	15 (62.5)	
Latino	5 (10.4)	2 (8.3)	3 (12.5)	
Multicultural	8 (16.67)	3 (12.5)	5 (20.8)	
Parent education				.47
High school or tech	7 (14.6)	4 (16.7)	3 (12.5)	
Some college	10 (20.8)	4 (16.7)	6 (25.0)	
College graduate	31 (64.6)	16 (33)	15 (45.8)	
Married or Living Together	41 (85.4)	20 (83.3)	21 (87.5)	.78
Primary Anxiety disorder				.63
Specific Phobia	4 (8.3)	2 (8.3)	2 (8.3)	
Generalized anxiety	12 (25)	7 (29.2)	5 (20.8)	
Social anxiety	16 (33.3)	8 (33.3)	8 (33.3)	
Separation Anxiety	10 (20.8)	3 (12.5)	7 (29.2)	
Obsessive Compulsive	6 (12.5)	4 (16.7)	2 (8.3)	
Comorbid Conditions				
Depressive disorders	4 (8.3)	3 (12.5)	1 (4.2)	.30
Disruptive Behavior Disorders	9 (22.9)	3 (12.5)	6 (25.0)	.27
Autism Spectrum Disorders	2 (4.2)	1 (4.2)	1 (4.2)	1.00
Drop out	7 (14.6)	3 (12.5)	4 (16.7)	.68
Any prior counseling use ($n = 47$)	18 (38.3)	8 (34.8)	10 (41.7)	.63
Any prior medication use	5 (12.5)	2 (10)	3 (15)	.63

FF = face to face; TSB = therapist-supported bibliotherapy.

A total of 62 families were contacted and assessed for eligibility (see Fig. 1). Of these families, 14 were excluded and 48 families were randomized. Given the feasibility focus and small sample size, a block randomization procedure was used to minimize potential imbalances in assignment to treatment condition; subjects were randomized in blocks of four. In total, 24 families received CBT delivered in-person at their primary care clinic and 24 families received a therapist-supported, parent implemented CBT intervention (i.e., therapist-supported bibliotherapy-TSB). Parent-child dyads completed interviews at baseline, post-treatment and three-month follow-up by an independent evaluator who was blind to treatment condition. Standardized anxiety questionnaires were administered at the three time points; a satisfaction measure was administered at post-treatment and three-month follow-up and a questionnaire about barriers was administered at post-treatment.

Treatments

Cool Kids face-to-face (FF)

The Cool Kids program (Lyneham & Rapee, 2006; Rapee, Abbott, & Lyneham, 2006) consists of 10 weekly sessions each lasting approximately 60–90 min and conducted with both the parent and child in the clinic. Parents are typically present for the first and last ten minutes of the session. The major components of the intervention include psychoeducation, changing unhelpful thoughts,