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ORIGINAL PAPER

Flexible Manualized Treatment for Pediatric Obsessive–Compulsive Disorder: A Case Study

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Abstract The following case study describes the treatment of an 8 year-old girl with early-onset obsessive compulsive disorder using a manualized cognitive-behavioral therapy with exposure and response prevention (CBT/EPR) protocol, implemented using a "flexibility within fidelity" approach. The case study focuses on how the treatment manual was successfully implemented in a flexible manner to address unique aspects of the case. These unique factors included the child's extreme shyness at the beginning of treatment (with implications for rapport building), the primarily obsessional presentation of this child's symptoms, the child's avoidance of discussing the content of her obsessive thoughts, and secondary depressive symptoms (excessive guilt, frequent crying, and sadness) that contributed to the child's impairment and distress. Assessment of progress indicated improvement in symptoms after four sessions of cognitive skill building and again in the last five sessions after implementing increased exposure to obsessive thoughts using narrative techniques. The implications for clinicians and student therapists, including the importance of rapport building, developmentally tailoring treatment, and flexibly implementing treatment to address the unique characteristics of the individual patient are discussed.

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Introduction

Obsessive–compulsive disorder (OCD) is a psychological disorder marked by a cycle of persistent, unwanted, intrusive thoughts (obsessions) and associated repetitive behaviors or mental acts (compulsions), which are aimed at reducing the distress caused by the obsessions. In individuals with OCD, these symptoms become very time-consuming, cause significant distress, and interfere with daily functioning (American Psychiatric Association 2013). Earlier age of onset of OCD and longer course of the disorder predict greater functional impairment in adulthood in social, work, and family domains (Dell'Osso et al. 2013), highlighting the need for prompt assessment and effective treatments for young children with OCD. Cognitive-behavioral therapy with exposure and response prevention (CBT/ERP) is widely accepted as a "first-line" psychotherapeutic intervention for mild to moderate OCD in both children and adults, with concurrent psychotropic medication treatment with SSRIs suggested for severe cases (American Academy of Child and Adolescent Psychiatry 2012; Jordan et al. 2012; Ponniah et al. 2013). Although CBT/ERP manualized treatments are consistently found to be efficacious treatments for pediatric OCD across large treatment studies (Nakatani et al. 2009; Sánchez-Meca et al. 2014; Valderhaug et al. 2007), individual therapists must be mindful of unique patient factors when implementing these treatment manuals in clinical practice.

March and Mulle (1998) acknowledge the importance of adapting CBT/ERP to the therapist's own clinical style and

adapting manualized techniques to the specific developmental stage of the child as important factors influencing the success of using CBT/ERP manualized treatment in clinical practice. Additionally, March and Mulle (1998) encourage therapists to be aware of child temperament/personality differences, psychiatric comorbidity, and family and social factors when implementing CBT/ERP. "Flexibility within fidelity" is an approach to practical implementation of manualized psychotherapy protocols that involves using clinical judgment to achieve broad adherence to a previously validated treatment, while modifying specific details of treatment in an individualized manner (Kendall et al. 2008).

The present case study describes the treatment of a child with early-onset OCD using a CBT/ERP treatment manual, *OCD in Children and Adolescents: A Cognitive Behavioral Treatment Manual* (March and Mulle 1998), by a clinical psychology doctoral student therapist working under the supervision of a licensed clinical psychologist in a hospital outpatient setting. The case study describes how this treatment manual was implemented in a flexible manner to successfully treat the child's OCD while attending to unique factors of the case. These unique factors included the child's extreme shyness at the beginning of treatment (with implications for rapport building), the primarily obsessional symptom presentation, the child's avoidance of discussing the content of her obsessive thoughts, and secondary depressive symptoms (excessive guilt, frequent crying, and sadness) that contributed to the child's impairment and distress. Permission was obtained from the patient's parents and the relevant IRB to use the patient's treatment data in a published case study. All potentially identifying information has been changed and pseudonyms are used throughout this case study to protect patient confidentiality.

Case Study

History and Presenting Problems

"Emily" is an 8 year-old Caucasian girl who was brought to a pediatric psychology outpatient clinic by her parents due to acute onset of obsessive thoughts and compulsive behaviors. Approximately 3 weeks prior to her intake appointment, Emily had begun crying daily at school and at home after having what she termed "bad thoughts." She reported having several different types of upsetting intrusive thoughts, namely thoughts that she may have lied or broken a rule, thoughts with sexual themes (thoughts about kissing boys), thoughts of "bad words", and thoughts of harm befalling her mother. Emily also exhibited anxiety when in situations with male peers due to fears about having intrusive sexual thoughts about them. Compulsive behaviors consisted mainly of confessing to her mother when she had a "bad thought" multiple times per day. In later sessions, it was also revealed that Emily avoided answering questions directly (saying "maybe yes or maybe no") to avoid telling a lie, even to questions that were relatively straightforward. She exhibited significant anxiety when she was not near by her mother and unable to confess. Emily's parents indicated that Emily's symptoms were significantly impairing her functioning due to school avoidance, leaving class frequently to talk with the school counselor, and difficulty remaining at playdates and parties with friends.

Emily lives with both of her biological parents in a suburb of a small city, and is an only child. She did not have any chronic medical conditions, but did have two strep throat infections, approximately 10 months and 2 weeks prior to the onset of obsessive–compulsive symptoms. However, because she did not experience a sudden onset of OCD symptoms, tics, or choreiform movements, a diagnosis of Pediatric Acute-onset Neuropsychiatric Syndrome (PANS) was ruled out. According to her parents, Emily had an anxious temperament as an infant. When Emily was a young child, she became very upset during separation from her parents. She was in the second grade when she entered treatment and was doing well academically. Emily's parents and Emily herself denied that she had any history of experiencing physical or sexual abuse. When asked if Emily may have had prior exposure to media with sexual content, her mother reported that Emily occasionally watched television shows targeted for pre-teens that mentioned characters kissing their boyfriends, but nothing more explicit than that as far as she was aware.

Initial Assessment

Emily's parents attended the initial intake appointment to provide information about Emily's current symptoms and developmental history. At the intake appointment, Emily's parents were encouraged to make an appointment with her pediatrician to have a follow up evaluation of her recent strep throat infection and to make an appointment with a child psychiatrist to discuss psychotropic medication options. The therapist received permission from her parents to contact her school counselor for collateral information during the assessment period, but was unable to make contact with him until halfway through treatment. While March and Mulle (1998) suggest one 1.5 h long assessment appointment prior to beginning CBT/ERP, Emily's assessment period was spread over three 50 min appointments in order to

develop rapport with Emily, who exhibited significant shyness and anxiety about therapy.

The main purpose of the assessment period was to determine the nature of Emily's anxiety and behavior change and to rule out any other possible diagnoses or complicating factors. Additionally, play with the therapist was utilized for establishing the necessary rapport with Emily to facilitate CBT/ERP prior to the implementation of the treatment manual. During the assessment period, the therapist gave Emily's mother the Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS) Checklist (Scahill et al. 1997) and the Behavior Assessment System for Children, Second Edition, Parent Rating Scale (BASC-2-PRS) (Reynolds and Kamphaus 2004) for both her and Emily's father to complete, and completed the CY-BOCS Interview with Emily's mother.

At the first assessment appointment with Emily present, Emily was extremely tearful and clung to her mother. Her mother accompanied her to the room and Emily avoided eye contact and did not speak to the therapist for the first 15 min of the appointment. The therapist drew pictures with Emily and she eventually began to respond to non-threatening questions about herself. The therapist explained the body's fear response to Emily using child-appropriate terminology and drawings. After this explanation, Emily's affect brightened noticeably, and she became more engaged with play with the therapist and her mother for the remainder of the time.

During the second assessment appointment, the therapist met with Emily alone and focused on continuing to build rapport with her by playing and drawing pictures with her while inquiring about her symptoms. During the course of play with the therapist, Emily answered most questions with "maybe yes, maybe no", even in response to questions that had relatively straightforward answers. The therapist inquired about this, and Emily reported that she was very afraid that she might tell a lie, and that she answered questions in this manner to avoid inadvertently lying. She also reported that she had "bad thoughts" multiple times per day and would feel compelled to tell her mother these thoughts. Emily was hesitant to describe the content of her "bad thoughts" but reported that they involved boys.

During the third assessment appointment, the therapist continued to focus on building rapport through play while inquiring about Emily's symptoms. Emily avoided answering questions about her thoughts and feelings and indicated that she was afraid she might tell the therapist something the therapist would not like. The therapist discussed this fear with her and helped normalize the idea that many people have potentially embarrassing intrusive thoughts while maintaining a non-judgmental attitude toward the content of her "bad thoughts".

Assessment Measures and Baseline Results

BASC-2-PRS

The BASC-2-PRS is a parent report measure of their child's observed behaviors and contains composite measures of internalizing, externalizing, and other behavioral symptoms, as well as adaptive functioning (Reynolds and Kamphaus 2004). Both of Emily's parents completed the BASC-2-PRS in a manner that should be considered valid based on the validity indices. Results of the BASC-2-PRS indicated that Emily exhibited clinically significant levels of anxiety and other internalizing symptoms (such as depressive and mild somatic symptoms). Both of her parents indicated that Emily exhibited behaviors that may appear strange to others (Atypicality scale). This likely reflected observed compulsive behaviors that appeared out of place. Results indicated that Emily exhibited social withdrawal and mild deficits in social skills, as well as mild deficits in overall adaptive functioning. Additionally, her mother indicated that Emily exhibited subclinical attention, hyperactivity, and behavioral problems. See Tables 1 and 2 in Appendix for pre- and post-treatment T-scores on the BASC-2-PRS scales/composite measures.

Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS) Checklist and Interview

The CY-BOCS measures content and severity of obsessive–compulsive symptoms in children, and consists of a self/parent report checklist of potential obsessive and compulsive symptoms and a clinician administered interview of symptom severity (Scahill et al. 1997). Emily's pre-treatment CY-BOCS score (21) was in the moderate range of overall OCD symptom severity, with severity of impairment due to obsessions higher than that due to compulsions.

Case Conceptualization and Treatment Plan

After the assessment period, the therapist determined that a diagnosis of OCD was most appropriate in explaining Emily's symptoms, and this diagnosis was used to guide treatment planning. Her obsessions were more frequent and impairing than her overt compulsions, but she may have engaged in equally frequent covert compulsions, which can be common with this type of presentation and age of child. Guilt about the content and meaning of her obsessions greatly influenced the development of depressive symptoms secondary to her main diagnosis of OCD. Emily had exhibited some anxiety symptoms early in her childhood, which suggests a longer-term pattern of mild anxiety punctuated by an acute onset of significantly impairing OCD. Before implementing CBT/ERP, the therapist met

with Emily's mother to review her diagnoses and treatment plan. Her mother was given information about OCD and a brief overview of CBT/ERP treatment. At this time, the therapist gave Emily's mother the first part of the "Tips for Parents" handout from the treatment manual (March and Mulle 1998, pp. 247–251).

Overview of CBT/ERP Manualized Treatment

Emily's treatment was based on *OCD in Children and Adolescents: A Cognitive Behavioral Treatment Manual* by March and Mulle (1998), with modifications to tailor treatment to the predominately obsessional presentation of her symptoms and address issues related to rapport building, her avoidance of talking about the content of her obsessive thoughts, and feelings of excessive guilt. March and Mulle (1998) provide a treatment protocol for CBT/ERP in children and adolescents that involves four steps: psychoeducation, cognitive training, creating a stimulus hierarchy, and graded exposure with response prevention (ERP). Introduction of each step occurs in order, with revisiting of skills learned in previous steps throughout the course of treatment. The post-treatment stage involves relapse prevention, during which periodic "booster" sessions are recommended. The importance of family involvement in treatment is stressed and periodic parent-only sessions with the therapist are suggested (March and Mulle 1998).

Each of Emily's 50 min psychotherapy sessions followed a similar structure, which began with 5–10 min of checking in with Emily and her parents about her symptoms over the previous week followed by 20–25 min of introducing new concepts and skills from the treatment manual with Emily alone. The therapist would facilitate semi-structured play for about 10 min at the end of each session to help facilitate the therapeutic relationship and provide Emily with a space to express her thoughts and emotions in a less structured and directed manner than in the initial part of the session. At the end of each session, 5–10 min were spent checking in again with Emily and her parents to review new skills and concepts and discuss homework for the next week. Emily completed the four main steps of treatment in twelve sessions, with Session 1 focused on psychoeducation, Sessions 2 through 5 focused on cognitive training and "mapping OCD", Session 6 was a parent-only session, and Sessions 7 through 12 focused on exposure and response prevention, including greater exposure to obsessive thoughts.

Course of Treatment

Special Considerations

While Emily did warm up to the therapist and became more engaged after the assessment period, she often "shut down" and refused to speak to or otherwise engage with the therapist if certain topics (such as the content of her obsessive thoughts) were brought up in a direct manner. Therefore, the therapist had to become very attuned to Emily's affect during therapy and quickly redirect with play or use less direct didactic techniques (such as telling stories about "other kids" with OCD when introducing concepts) to maintain her engagement. Due to this, and other unique factors of her case discussed below, several of the four steps were lengthened over more sessions than indicated in the treatment manual.

Session 1: Psychoeducation

During Session 1 with Emily, the therapist explained the neurobehavioral nature of OCD by drawing a picture of the brain and using a "broken fire alarm" metaphor to explain that when a person has OCD, the "worry" part of the brain (amygdala) sends off fear signals even in the absence of immediate danger. As suggested by the manual, to facilitate externalization of the disorder, the therapist encouraged Emily to draw a picture of what OCD looked like and to name it, which she called "OCD Monster." To preview the idea of a stimulus hierarchy (which would be implemented in future sessions), the therapist encouraged her to think of "times that OCD Monster is more likely to win and times that Emily is more likely to win." Emily reported that "OCD Monster wins" most often when she is at school, and she was encouraged to note those times she noticed OCD "winning" until her next session.

Sessions 2–5: Cognitive Training and Creating a Stimulus Hierarchy

Steps 2 and 3 were introduced simultaneously during Emily's treatment. While the treatment manual suggests introducing graded ERP homework by Session 3 (March and Mulle 1998), Emily's therapist focused on cognitive training and "mapping OCD" (creating a stimulus hierarchy) with her for Sessions 2 through 5. This decision was made because Emily's obsessive thoughts were more prominent and impairing than her compulsive behaviors, and it was determined that she would need more practice with training in cognitive skills before beginning ERP.

During Session 2, the concept of subjective units of discomfort was introduced to Emily using the "fear thermometer" metaphor (March and Mulle 1998). She was encouraged to rank her obsessive thoughts using the fear thermometer. The idea of "mapping OCD" was also elaborated on during this session, by discussing situations in which "OCD Monster" or Emily were more or less likely to "win." Her homework for the next several sessions was to write down her obsessive thoughts when they

occurred along with a fear thermometer rating for each thought, using worksheets provided by the therapist derived from the manual. Emily noted several obsessive thoughts that she had between sessions, with the fear thermometer rating. She was unwilling to discuss the content of the obsessions beyond the vague descriptions she had written (ex. "Had a thought about a boy"). This resistance to discussing the content of her obsessions was addressed in later sessions as part of increasing exposure to the content of her obsessive thoughts.

During Sessions 3, 4, and 5, Emily's therapist introduced the idea of constructive self-talk by discussing how she could "boss back OCD." Emily decided to say "You're not the boss of me OCD!" and continued to use this self-talk statement throughout treatment. Cultivating non-attachment to obsessive thoughts was also introduced, and Emily created the statements "These brain hiccups will pass in a moment" and "I'm going to go play while you go away, OCD Monster" to build this skill. With the therapist, she drew pictures of herself saying the statements to "OCD Monster" and used puppets to practice self-talk statements. Emily was encouraged use this "toolkit" of cognitive strategies outside of session when she had obsessive thoughts.

Session 6: Parent Session

For Session 6, the therapist met alone with Emily's mother to discuss Emily's progress and the next phase of therapy. Her mother reported that Emily's confessions had diminished significantly to once or twice per week. However, Emily still exhibited school avoidance and was crying during class several times per week. Her mother believed that Emily was still having obsessive thoughts, but would not discuss their content with her or her husband. The therapist gave Emily's mother the next section of the "Tips for Parents" handout from the treatment manual and discussed ways that she and her husband could be supportive of Emily's emotions while refraining from reinforcing her confession compulsions. Emily's mother and the therapist created statements that Emily's parents could use to validate her emotional experience, provide support, and direct her towards the cognitive skills to use to cope with her distress, while not allowing her to involve her parents in her compulsions, such as "I love you and I know you'll be able to tackle OCD," and "That's OCD talking right now, why don't you use some of your tools from your tool kit to talk back to OCD?"

Sessions 7–12: Graded Exposure and Response Prevention (ERP)

Prior to formal introduction of ERP, those principles were used with Emily during a natural situation in session. While engaged in free play at the end of Session 5, Emily became very quiet and avoided eye contact with her therapist. When asked what happened, Emily reported she had begun having obsessive thoughts and requested to see her mother in the waiting room immediately. The therapist asked Emily where her "fear temperature" was (she responded "7") and suggested that they practice "talking back" to OCD together before going to her mother. The therapist encouraged Emily to say several of the self-statements she had previously learned out loud together, in a playful manner. After saying these statements out loud and drawing pictures for several minutes, Emily reported that her "fear temperature" was a "3." In this way, the therapist introduced response prevention (i.e. not immediately confessing to her mother) in session and modeled cognitive strategies that Emily could use during later ERP exercises.

ERP was formally introduced during Session 7. Emily's homework after Sessions 7 and 8 was to chart her "fear temperature" when she had an obsession and then chart her temperature for every minute after while engaging in cognitive strategies from her "toolkit," using worksheets provided from the manual. Emily was instructed to avoid going to her mother to confess until her "fear temperature" was "0." She brought her "fear temperature" charts to subsequent sessions to review with the therapist. Both Emily and her mother reported that she was readily able to avoid confessing to her mother, and that this behavior had almost entirely stopped by Session 9.

During Session 7 and 8, Emily would readily talk about when she had obsessive thoughts and her "fear temperature", but was extremely resistant to discussing the actual content of those obsessions. Between Session 7 and 8, Emily's therapist spoke with her school counselor, who reported that Emily had reported to him and a classroom aide that her obsessive thoughts were making her feel extremely guilty. Emily reported that she continued to cry in school when she had "bad thoughts." It became evident that while Emily was able to resist confessing to her mother, her obsessive thoughts were still causing her significant distress and guilt. Therefore, subsequent sessions would focus on increasing exposure to the content of her obsessive thoughts.

During Session 9, Emily's therapist drew "thought" bubbles with several common obsessions, including ones the therapist was relatively certain Emily had and had not experienced before. The therapist told her that these thoughts were all things that "OCD Monster" sometimes says to children with OCD, such as "Everything must be in order" and "My thoughts can make bad things happen". Emily was encouraged to color in the thoughts that "OCD Monster" had said to her before in one color and those that "OCD Monster" had not said to her before in a different

color. In this way, the therapist obtained a clearer idea of the content of Emily's obsessions.

Techniques from the Narrative Approach (continuing to externalize the problem and creating "self-stories") were utilized in Sessions 9 through 12 (White and Epston 1990). Externalizing the problem by viewing symptoms as separate from the patient's core self helps the patient reframe the nature of their symptoms from being a bad, unchanging part of themselves to a set of obstacles they can overcome, thus fostering an increased sense of agency (White and Epston 1990, p. 65). Creating a new "self-story" in therapy is one way in which the problem can be externalized and allows the patient to create a "success" narrative of their own life to replace the previous problem-based self-narrative (White and Epston 1990, p. 163). In Session 9, during non-directive free play, Emily created a story about "OCD Monster" throwing "sticky bubblegum thoughts" on a brain, and "Goody" who helped remove the "sticky bubblegum thoughts," in effect externalizing the problem by creating a strong "self" character that battled her unwanted thoughts. She continued to elaborate on this narrative in the last four sessions of treatment through drawing pictures. The therapist discussed with Emily the content of the "sticky bubblegum thoughts" and what "Goody" had said to "OCD Monster" to make him go away in subsequent sessions. This narrative process allowed Emily to elaborate on the content of her obsessions and review cognitive strategies for "bossing back" OCD.

Additionally, while drawing her stories, Emily frequently remarked that it was not the brain's fault that "OCD Monster" threw "sticky bubblegum thoughts" on it, and increasingly self-identified with the "Goody" character that helped remove the "sticky bubblegum thoughts." Indeed, she remarked in Session 10 that had she started to pretend that she was "Goody" herself in between sessions when she experienced obsessive thoughts. By externalizing the problem ("OCD Monster") through a narrative process, Emily was able to process the guilt she felt about her obsessions by acknowledging the unwanted aspect of those thoughts. Her narratives also allowed her to "re-write" her self-identity as being inherently good and possessing agency.

Emily continued to exhibit some resistance to discussing the exact content of her obsessions (ex. using vague terms like "thoughts about boys" to describe obsessions with possible sexual content). However, after increased exposure to those thoughts through the narratives she created, Emily reported the anxiety she experienced about those thoughts was briefer and less intense. Her mother also reported that Emily was less avoidant of school and being in situations with male peers. At Sessions 11 and 12, Emily and her parents all reported that Emily had not experienced any obsessive thoughts that were more than a "3" on the fear thermometer and had not engaged in any compulsive behaviors since Session 10.

Summary of Treatment Outcome

At the end of each session, Emily's therapist completed the NIMH Global Obsessive Compulsive Scale (NIMH-GOCS) (Kim et al. 1993) and the Clinical Global Impressions Scale (CGI) (Guy 1976) on Emily's reported symptoms over the previous week. Both scales were obtained from the treatment manual (March and Mulle 1998). The week before Session 12, both of her parents completed the BASC-2-PRS and the CY-BOCS checklist again. The therapist administered the CY-BOCS severity interview again during Session 12.

The NIMH-GOCS is a one item, clinician rating scale of overall OCD severity (Kim et al. 1993). Emily's score on the NIMH-GOCS was in the severe range (score = 12) at Session 1 and dropped markedly to the minimal range (score = 2) at Session 12. Her NIMH-GOCS scores remained in the severe range at Sessions 1, 2, and 3, and changed from the clinical to subclinical ranges between Sessions 6 and 7 (see Fig. 1 in Appendix). This change from the clinical to subclinical range occurred after ERP was used in Session 5, but before formal introduction of ERP homework in Session 7. The CGI is a one item, clinician rating scale of overall illness severity. Scores range from 7 ("among the most extremely ill") to 1 ("normal, not at all ill") (Busner and Targum 2007). Emily's CGI score was a 5 ("markedly ill") from Session 1 through 4, and then gradually decreased, with a score of 2 ("borderline mentally ill") at Sessions 11 and 12 (see Fig. 1 in Appendix). The decrease in CGI score began at the end of the introduction of cognitive training and "mapping OCD" and continued through the introduction of ERP and narrative techniques.

On the BASC-2 Parent Rating Scales, several of the clinical and adaptive functioning scales/composites changed in a more adaptive, less clinically impairing direction post-treatment. A Reliable Change Index (RCI) score was calculated for each BASC-2-PRS score to determine whether improvement in scores pre- versus post-treatment was statistically reliable. The RCI is calculated by dividing the difference between the pre- and post-treatment scores by the standard error of difference between the two test scores. The standard error of difference is calculated by taking the square root of the standard error of measurement squared multiplied by two (Jacobson and Truax 1991). The standard error of measurement for each scale/composite was calculated using the test–retest reliabilities and standard deviations for the general population obtained from the BASC-2 Manual (Reynolds and Kamphaus 2004). An

RCI score greater than 1.96 indicates it is unlikely ($p < .05$) that the difference between the pre- and post-treatment scores is due solely to expected score fluctuations between initial testing and re-testing, and that the change in scores reflects real change (Jacobson and Truax 1991). When comparing Emily's pre- and post-treatment scores, the RCI was significant on the Depression scale, Atypicality scale, Attention Problems scale, Social Skills scale, and Behavioral Symptoms Index composite based on her mother's report and on the Anxiety scale based on her father's report. This indicates that improvement on each of these scales/composites was likely due to treatment effects as opposed to measurement error. See Tables 1 and 2 in Appendix for the BASC-2-PRS pre- and post-treatment T-Scores and RCI scores.

Emily's parents did not check any obsessive–compulsive symptoms on the final CY-BOCS checklist. During the CY-BOCS interview at Session 12, Emily reported having had about one obsessive thought per week or less. Emily's post-treatment CY-BOCS severity score was in the non-clinical range (3), which was a marked change from her "moderately severe" pre-treatment score (21). An RCI score was calculated for Emily's pre-and post-treatment CY-BOCS scores using the standard deviation and test–retest reliability from a recent psychometric study of the CY-BOCS in children ages 5–8 (Cook et al. 2014). Emily's RCI score on the CY-BOCS (RCI = 5.32) was significant, indicating that improvement in her CY-BOCS severity score reflected real change due to treatment effects.

Overall, these parent report and clinician administered assessment measures corroborated the qualitative assessment that Emily showed marked improvement of her obsessive–compulsive symptoms over the course of treatment. Additionally, she exhibited reductions in other internalizing symptoms (depression and general anxiety) and improvement in overall adaptive functioning, including improved social skills. Improvement was apparent after the introduction of cognitive restructuring by Session 4, and continued gradually after the introduction of ERP and implementation of narrative techniques.

After Emily completed the first four stages of CBT/ERP and her obsessive–compulsive symptoms were largely in remission, she entered the final relapse prevention stage. After completing Session 12, Emily returned for three follow-up sessions with her therapist, each approximately 3 weeks apart. The main purpose of each follow-up session was to assess for any change in symptoms and to continue to review with Emily and her parents the strategies she learned for coping with OCD. At each follow-up session, obsessive–compulsive symptoms were assessed by talking with Emily and her mother, and both reported that she had experienced few, if any obsessive thoughts during this time and was no longer confessing to her mother.

Due to the yearly change in doctoral student practicum placements at the clinic where she was treated, Emily's care transferred to a new therapist (a licensed clinical psychologist) after the third follow-up session. As of 1 year from beginning treatment, Emily had seen her new therapist for four additional follow-up sessions (about once monthly). Her new therapist began incorporating the Coping Cat Workbook (Kendall and Hedtke 2006) into therapy to address mild generalized anxiety symptoms that developed at the beginning of the new school year. As of 1 year from beginning CBT/ERP, Emily continues to show remission of her OCD symptoms.

Discussion

Emily's case provides an example of tailoring a manualized protocol to fit to the unique needs of the patient, using the "flexibility within fidelity" approach. In many ways, Emily's symptoms were a classic presentation of acute childhood-onset OCD, including frequent, intrusive thoughts of a sexual/moral nature and confession compulsions. This assessment and case conceptualization influenced her therapist to choose CBT/ERP as the guiding framework for treatment, due to extensive empirical support for this treatment in children with OCD. Her case was relatively uncomplicated by external sociocultural pressures, and her supportive parents, teacher, and school counselor were instrumental in assisting her recovery.

Unique, complicating aspects of Emily's case included her extreme shyness at the beginning of treatment, the primarily obsessional presentation of her symptoms, her avoidance of discussing the content of her obsessive thoughts, and secondary depressive symptoms such as excessive guilt, frequent crying, and sadness. Flexible implementation of the treatment manual included an extended assessment period to allow for more time to build rapport and assess symptoms prior to beginning CBT/ERP. Additionally, flexible implementation involved greater focus on cognitive skill building prior to implementation of ERP due to the primarily obsessional nature of the patient's diagnosis. Techniques from Narrative Therapy (White and Epston 1990) were integrated into treatment to help the patient express the content of her obsessive thoughts in a non-threatening manner and to allow her to process her feelings of guilt and increase her sense of personal agency by re-writing a successful "self-story."

Emily's case illustrates the importance of thorough assessment and case conceptualization in guiding the selection of the best scientifically supported treatments, while remaining sensitive to the unique emotional

experience of the patient and using clinical judgment to modify treatment and integrate techniques from other approaches as needed. We encourage therapists to be creative when encountering "stuck" points in therapy and to use methods of expression that fit best with the individual patient. This case shows the importance of being sensitive to the patient's unique experience when implementing a manualized treatment and modifying it as necessary to address individual areas of concern.

Appendix

See Fig. 1 and Tables 1, 2.

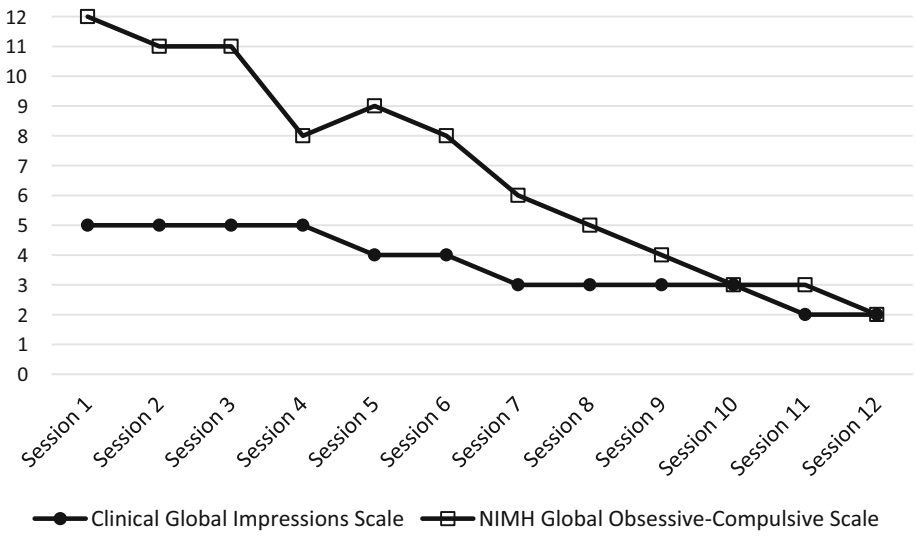

Fig. 1 Change in weekly clinician rating scale scores during treatment

Table 1 Behavior Assessment System for Children-Second Edition, Parent Report Scales (BASC-2-PRS) clinical scale and composite scores pre- and post-treatment

Composite/scale	Mother report			Father report		
	Pre-treatment T-score[a]	Post-treatment T-score[a]	Reliable change index	Pre-treatment T-score[a]	Post-treatment T-score[a]	Reliable change index
Externalizing problems	60	57	.55	48	54	N/A
Hyperactivity	63	63	N/A	50	65	N/A
Aggression	53	51	.29	44	46	N/A
Conduct problems	62	54	1.13	51	51	N/A
Internalizing problems	78	65	1.61	66	57	1.12
Anxiety	77	72	.52	80	60	2.06*
Depression	76	55	3.04*	59	53	.87
Somatization	64	59	.53	50	53	N/A
Behavioral symptoms	73	59	2.85*	57	59	N/A
Atypicality	78	49	3.42*	60	46	1.65
Withdrawal	69	69	N/A	62	71	N/A
Attention problems	67	53	2.57*	56	61	N/A

Reliable change index only calculated for T-scores that became closer to non-clinical range (i.e. decreased) at post-treatment

[a] Range by T-Score: non-clinical range <60, at-risk range ≥60 to <70, clinical range ≥70

* Significant reliable change index (≥1.96)

Table 2 Behavior Assessment System for Children-Second Edition, Parent Report Scales (BASC-2-PRS) adaptive functioning scale and composite scores pre- and post-treatment

Composite/scale	Mother report			Father report		
	Pre-treatment T-score[a]	Post-treatment T-score[a]	Reliable change index	Pre-treatment T-score[a]	Post-treatment T-score[a]	Reliable change index
Adaptive skills	34	41	1.62	40	38	N/A
Adaptability	37	35	N/A	37	35	N/A
Social Skills	31	44	2.13*	35	39	.65
Leadership	40	46	1.16	42	46	.77
Activities of daily living	37	44	1.17	49	39	N/A
Functional communication	38	42	.61	45	40	N/A

Reliable change index only calculated for T-scores that became closer to non-clinical range (i.e. increased) at post-treatment

[a] Range by T-score: clinical range ≤30, at-risk range >30 to ≤40, non-clinical range >40

* Significant reliable change index (≥1.96)

References

American Academy of Child and Adolescent Psychiatry. (2012). Practice parameters for the assessment and treatment of children and adolescents with obsessive-compulsive disorder. *Journal of the American Academy of Child and Adolescent Psychiatry, 51*(1), 98–113. doi:10.1016/j.jaac.2011.09.019.

American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.). Washington, D.C.: American Psychiatric Publishing.

Busner, J., & Targum, S. D. (2007). The Clinical Global Impressions Scale: Applying a research tool in clinical practice. *Psychiatry, 4*(7), 28–37. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2880930/.

Cook, N. E., Freeman, J. B., Garcia, A. M., Sapyta, J. J., & Franklin, M. E. (2014). Assessment of obsessive compulsive disorder in young children: Psychometric properties of the Children's Yale-Brown Obsessive Compulsive Scale. *Journal of Psychopathology and Behavioral Assessment,*. doi:10.1007/s10862-014-9465-7.

Dell'Osso, B., Benatti, B., Buoli, M., Altamura, A. C., Marazziti, D., Hollander, E., & Zohar, J. (2013). The influence of age at onset and duration of illness on long-term outcome in patients with obsessive-compulsive disorder: A report from the International College of Obsessive Compulsive Spectrum Disorders (ICOCS). *European Neuropsychopharmacology, 23*(8), 865–871. doi:10.1016/j.euroneuro.2013.05.004.

Guy, W. (1976). ECDEU assessment manual for psychopharmacology. Retrieved 15 Dec 2014 https://ia600503.us.archive.org/10/items/ecdeuassessmentm1933guyw/ecdeuassessmentm1933guyw_bw.pdf.

Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology, 59*(1), 12–19. doi:10.1037/0022-006X.59.1.12.

Jordan, C., Reid, A. M., Mariaskin, A., Augusto, B., & Sulkowski, M. L. (2012). First-line treatment for pediatric obsessive–compulsive disorder. *Journal of Contemporary Psychotherapy, 42*(4), 243–248. doi:10.1007/s10879-012-9210-z.

Kendall, P. C., Gosch, E., Furr, J. M., & Sood, E. (2008). Flexibility within fidelity. *Journal of the American Academy of Child and Adolescent Psychiatry, 47*(9), 987–993. doi:10.1097/CHI.0b013e31817eed2f.

Kendall, P. C., & Hedtke, K. (2006). *Cognitive-behavioral therapy for anxious children: Therapist manual* (2nd ed.). Workbook Publishing: Ardmore.

Kim, S. W., Dysken, M. W., Kuskowski, M., & Hoover, K. M. (1993). The Yale-Brown Obsessive Compulsive Scale and the NIMH Global Obsessive Compulsive Scale (NIMH-GOCS): A reliability and validity study. *International Journal of Methods in Psychiatric Research, 3*(1), 37–44.

March, J. S., & Mulle, K. (1998). *OCD in children and adolescents: A cognitive-behavioral treatment manual*. New York: The Guilford Press.

Nakatani, E., Mataix-Cols, D., Micali, N., Turner, C., & Heyman, I. (2009). Outcomes of cognitive behaviour therapy for obsessive compulsive disorder in a clinical setting: A 10-year experience from a specialist OCD service for children and adolescents. *Child and Adolescent Mental Health, 14*(3), 133–139. doi:10.1111/j.1475-3588.2008.00509.x.

Ponniah, K., Magiati, I., & Hollon, S. D. (2013). An update on the efficacy of psychological treatments for obsessive–compulsive disorder in adults. *Journal of Obsessive-Compulsive and Related Disorders, 2*(2), 207–218. doi:10.1016/j.jocrd.2013.02.005.

Reynolds, C. R., & Kamphaus, R. W. (2004). *Behavior assessment system for children manual* (2nd ed.). Bloomington: Pearson.

Sánchez-Meca, J., Rosa-Alcázar, A. I., Iniesta-Sepúlveda, M., & Rosa-Alcázar, Á. (2014). Differential efficacy of cognitive-behavioral therapy and pharmacological treatments for pediatric obsessive–compulsive disorder: A meta-analysis. *Journal of Anxiety Disorders, 28*(1), 31–44. doi:10.1016/j.janxdis.2013.10.007.

Scahill, L., Riddle, M. A., McSwiggin-Hardin, M., Ort, S. I., King, R. A., Goodman, W. K., & Leckman, J. F. (1997). Children's Yale-Brown Obsessive Compulsive Scale: Reliability and validity. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*(6), 844–852. doi:10.1097/00004583-199706000-00023.

Valderhaug, R., Larsson, B., Götestam, K. G., & Piacentini, J. (2007). An open clinical trial of cognitive-behaviour therapy in children and adolescents with obsessive–compulsive disorder administered in regular outpatient clinics. *Behaviour Research and Therapy, 45*(3), 577–589. doi:10.1016/j.brat.2006.04.011.

White, M., & Epston, D. (1990). *Narrative means to therapeutic ends*. New York: W.W. Norton and Company.