

CBT for PANS/PANDAS



Eric A. Storch, Ph.D.

All Children's Hospital Guild Endowed Chair
and Professor

University of South Florida

Treatment options remain unclear...

- Pharmacological treatments for PANDAS/PANS include:
 - Intravenous immunoglobulin and plasma exchange associated with significant reductions on Y-BOCS (Perlmutter et al., 1999)
 - Ongoing NIMH trial
 - Several studies have evaluated antibiotic treatment (Garvey et al., 1999; Snider et al., 2005; Murphy & Pichichero, 2002)
 - Supporting clinical accounts of acute therapy
 - Results have been mixed overall
 - Further examination is needed



What about CBT?

- Cognitive-behavioral therapy (CBT), alone or in combination with sertraline, is first line OCD treatment (POTS, 2004)
- CBT is associated with immediate and sustained improvements in family-based CBT (Barrett et al., 2004; Franklin et al., 2011; Storch et al., 2007)

The Role of CBT in PANS/PANDAS?

- Reduce acute impairment and symptomology
- Prepare and empower parents and child for potential future symptom exacerbations

How CBT Differs in PANS/PANDAS

- It generally does not...
- However, you have to consider potential factors:
 - Symptom severity
 - Dramatic nature of symptoms and associated clinical characteristics
 - Family factors
 - Potential for future symptom exacerbations

Symptom Severity



- Symptoms may be extremely severe shortly after an exacerbation/onset
- Determine timing of intervention
 - The therapist needs something to 'grab' onto
- May have to move a bit more slowly in treatment (or take longer)

Nature of Symptoms



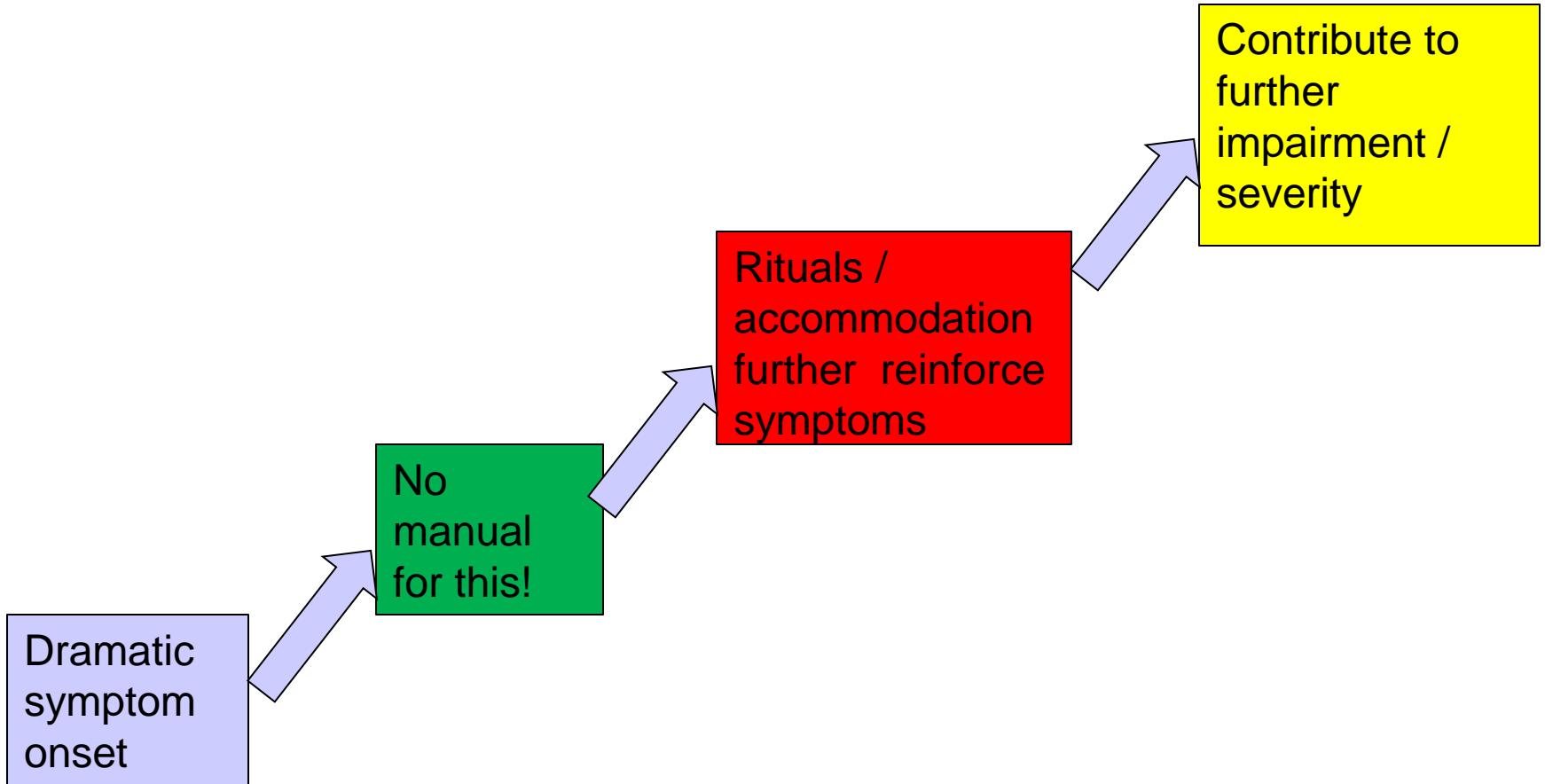
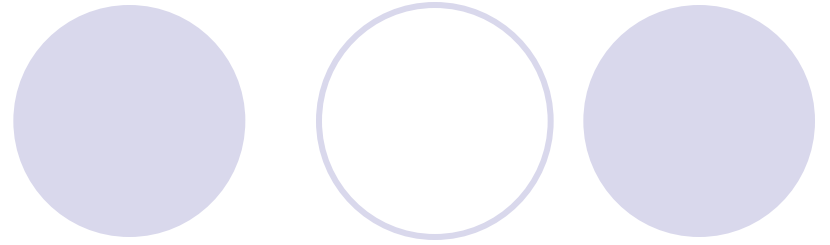
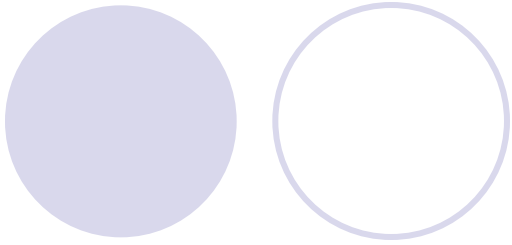
- Clinical characteristics may impact outcome that need to be considered
 - Insight
 - Comorbidity
 - Motivation

Family Factors and Accommodation

- Dramatic onset of families changes family functioning dramatically
 - Consider how the parent/family is doing
- Treatment model is to train “parents as therapists”
 - Address family accommodation in the course of treatment
 - Include on treatment hierarchy as appropriate
 - Always include parents in session

Potential for Future Exacerbations

- Although good probability for response, symptoms may return
- CBT provides family with a tool set for addressing such occurrences
 - Empowering families so they don't live in angst
 - Able to sort out what to do next should symptoms return
- May reduce severity of future episodes





Outcome data

- Case report of CBT for rapid onset pediatric OCD of the PANDAS phenotype in a six-year-old boy. (Storch et al., 2004)
 - Over a one-week intensive CBT protocol, marked symptom reductions measured by the CY-BOCS were found (Pre-treatment of 34, Post-Treatment of 8); treatment gains were maintained for one-year.
- Considerable clinical experience



Storch et al. (2006)

Participants

Seven children with PANDAS related OCD

- Aged 9-13 years ($M = 11.1$, $SD = 1.4$)
- 4 males, 3 females

- Inclusion Criteria:
 - primary diagnosis of OCD
 - CY-BOCS total score ≥ 16
 - stable on psychotropic medication at least 8 weeks prior to study

- Exclusion Criteria:
 - psychosis, pervasive developmental disorder, bipolar disorder, or current suicidality
 - diagnosis of mental retardation, or any psychiatric disorders or conditions that would limit their ability to understand CBT

Clinical Presentation

<u>Subject</u>	<u>Age/Gender</u>	<u>Primary Obsessions</u>	<u>Primary Compulsions</u>
1.	10-year-old female	Contamination fears Aggressive thoughts Somatic	Washing/Cleaning Checking Ordering/arranging Reassurance seeking
2.	10-year-old male	Contamination fears Aggressive thoughts Sexual thoughts	Washing/Cleaning Repeating Counting Reassurance seeking
3.	12-year-old male	Contamination fears	Washing/Cleaning
4.	11-year-old female	Contamination fears Aggressive thoughts Magical thoughts	Washing/Cleaning Checking Ordering/Arranging Reassurance seeking
5.	13-year-old male	Contamination fears Aggressive thoughts	Washing/Cleaning Checking Ordering/ Arranging
6.	9-year-old male	Contamination fears Somatic fears	Washing/ Cleaning Checking Ordering/Arranging Reassurance seeking
7.	11-year-old female	Contamination fears	Washing/Cleaning Checking Ordering/arranging Reassurance seeking



Procedure

- Unblinded raters
- Assessments were conducted at four time points: baseline, pre-treatment, approximately four weeks later, post-treatment, and 3-month follow-up
- All patients received 14 90-minute CBT sessions over 3 weeks.



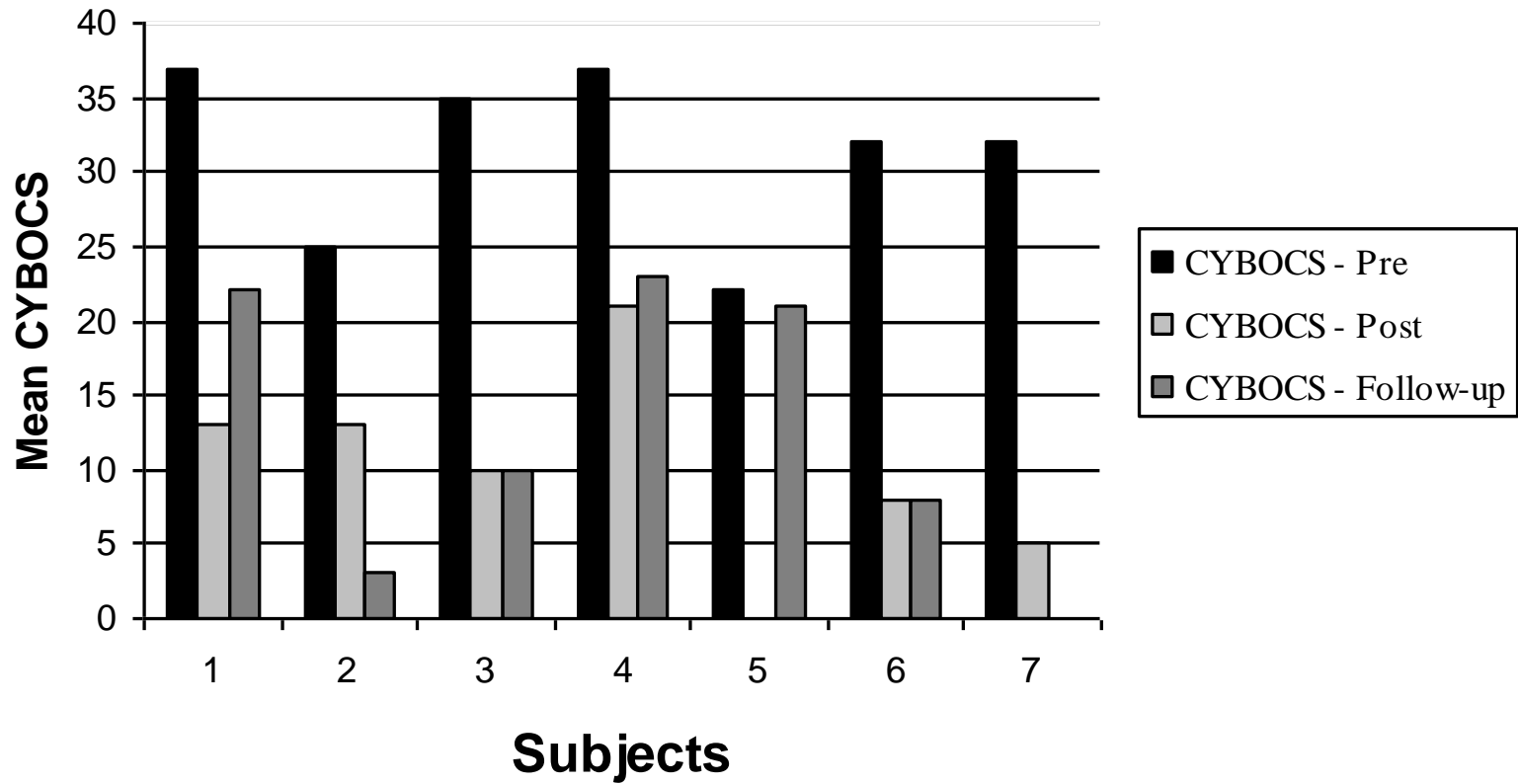
Results

Scale	Baseline M (SD)	Pre-TX M (SD)	Post-TX M (SD)	P- value	Effect size
CY-BOCS	28.0 (4.6)	31.4 (5.9)	10.0 (6.7)	.018	3.38
ADIS-P	6.4 (1.1)	6.4 (1.1)	2.4 (2.2)	.018	2.30
CGI-S	3.7 (0.8)	4.3 (1.0)	1.4 (1.0)	.017	2.90



- 71% and 50% were diagnosis free at Post-treatment and Follow-up.
- 86% and 50% were rated as much or very much improved at Post-treatment and Follow-up.

CY-BOCS Reductions for Each Child





Our findings

- Children showed significantly better ratings at Post-treatment and Follow-up on the CY-BOCS with a very large effect size.
 - On the CY-BOCS, symptom reductions of 68% and 46% were found at Post-treatment and Follow-up, figures that correspond favorably with POTS (2004).
- 71% and 50% of youth were diagnosis free at Post-treatment and Follow-up.
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- 86% and 50% were rated as much or very much improved at Post-treatment and Follow-up.



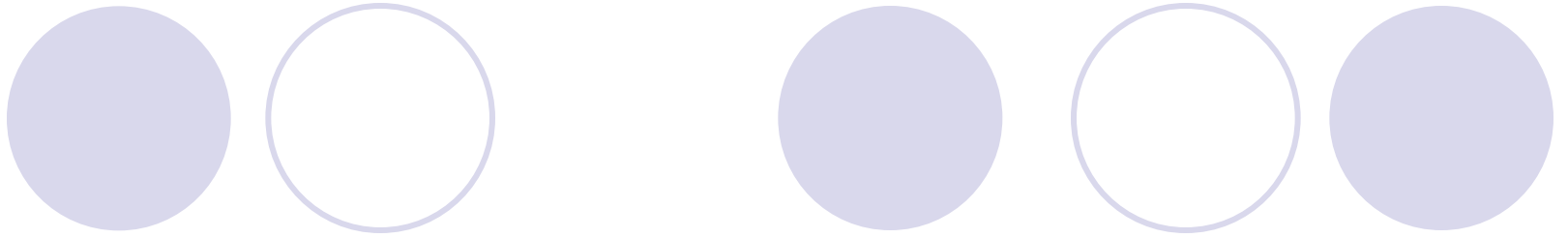
What didn't change...

- Subjects 1, 4, and 5 experienced partial or full relapses at Follow-up as evidenced by increased ratings on instruments.
 - It is notable that Follow-up CY-BOCS scores remained below Pre-treatment levels for two of these youth.

Take home points



- CBT should be a part of the treatment of kids with PANS/PANDAS
 - Despite etiological factors, rituals still reduce anxiety which reinforce further symptoms
- Family involvement is huge – parents as therapist model
 - Empowers families
 - May reduce impact of future bouts



estorch@health.usf.edu