



# APPLYING EXPOSURE AND RESPONSE PREVENTION TO YOUTH WITH PANDAS

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# Outline

1. Review core symptoms of pediatric obsessive compulsive disorder (OCD).
2. Discuss factors contributing to the maintenance of pediatric OCD.
3. Learn what happens in cognitive behavioral therapy (CBT) for pediatric OCD and the studies supporting its efficacy.
4. Learn how CBT may be modified for youth with the PANDAS subtype of OCD.
5. Discuss a case example.
6. Learn about local resources for finding a CBT therapist for your child.

# Pediatric OCD Symptoms

- Common Obsessions

- Contamination or illness concerns
- Fear of harm to self or others
- Concerns about what's right/wrong or about morality
- Superstitious obsessions
- Sexual thoughts

- Common Compulsions

- Excessive or ritualized washing or cleaning
- Checking
- Counting
- Touching or tapping
- Ordering/arranging
- Confessing or seeking reassurance

**TRIGGERING  
EVENTS**  
(ex: Strep  
infection)

**Family Factors,  
Extra-familial  
Factors,  
Temperament,  
Genetics**

**Affective  
Reactions**  
(Acute  
anxiety,  
frustration)

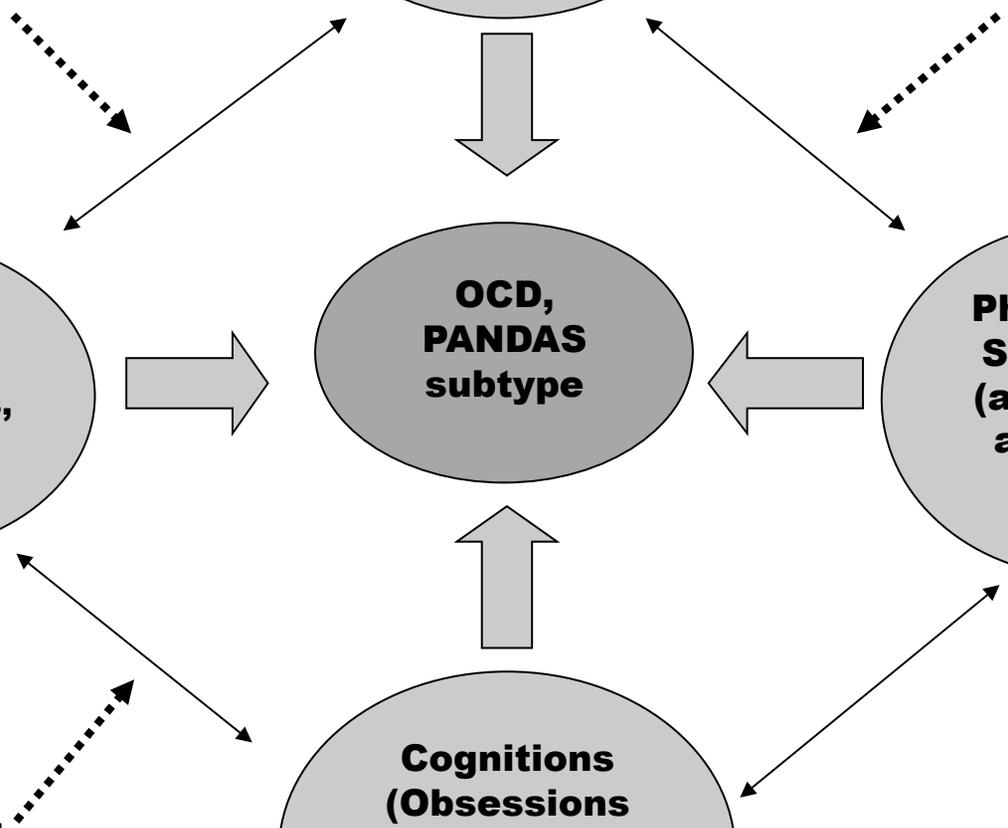
**Behavioral  
Responses**  
(Compulsions,  
avoidance)

**OCD,  
PANDAS  
subtype**

**Physiologic  
Symptoms**  
(autonomic  
arousal =  
panic)

**Environmental  
Consequences**  
(ex: missed  
school)

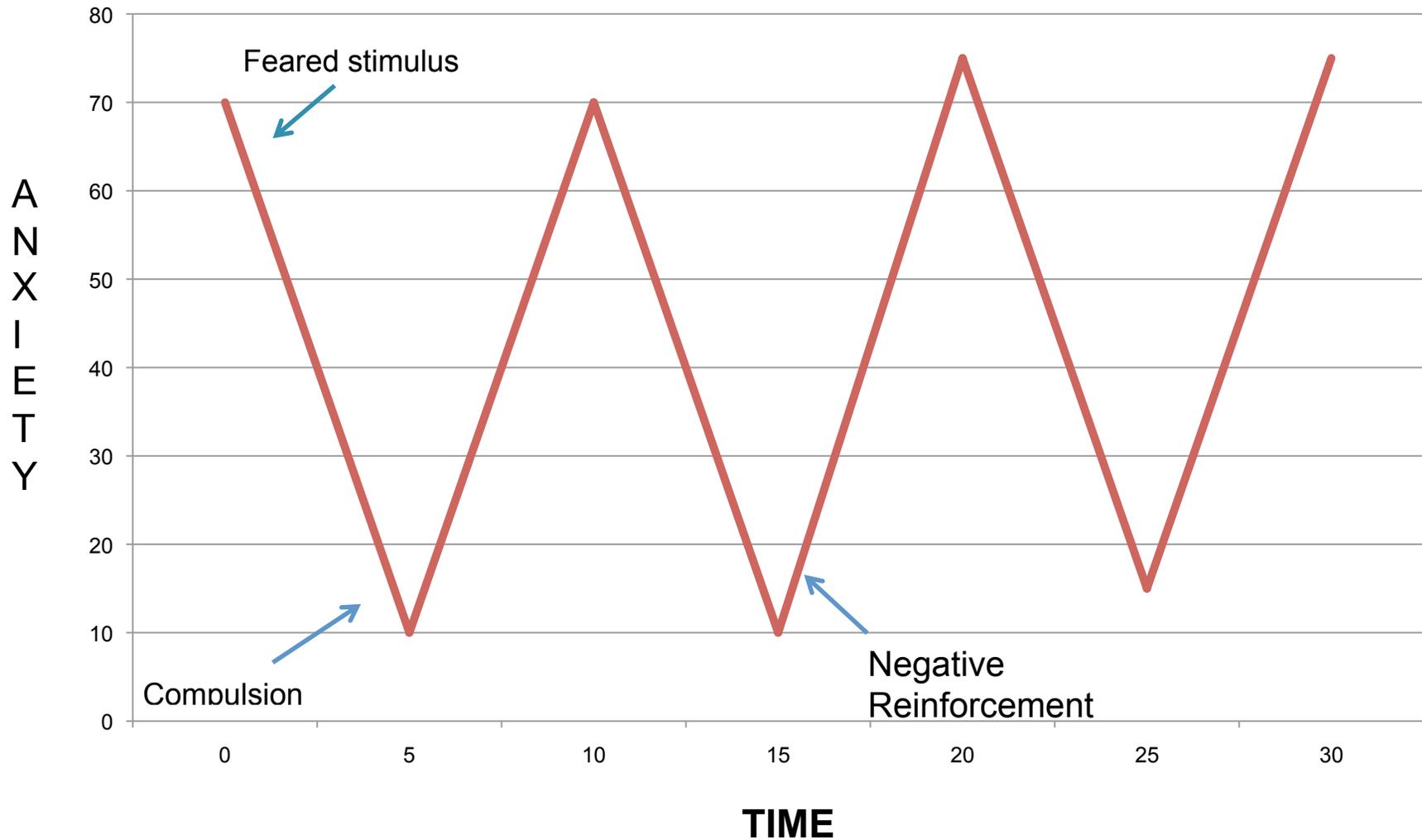
**Cognitions**  
(Obsessions  
or intrusive  
thoughts)



# Thinking styles associated with OCD

- Overestimation of risk and overarching sense of responsibility
- Intolerance of uncertainty and self-doubt
  - “I know it’s irrational, but there’s still a small chance it could happen, so I have to do it!”
- “Thought-Action Fusion”
  - Belief that “bad” thoughts are the same as engaging in bad actions
  - Example: If a thought comes into my head about hurting someone, it is as if I am actually hurting someone.

# Classical Conditioning





# Family Accommodation

- Parents may engage in children's compulsions or rituals, or they may provide excessive reassurance
- Family members may facilitate avoidance of feared stimuli
- In some cases, families modify their lifestyles to accommodate the child's OCD

# Assessment

- Structured Clinical Interviews
- Clinician-Administered Measure of Severity
  - Children's Yale-Brown Obsessive Compulsive Scale (CYBOCS)
  - Family Accommodation Scale (FAS)
- Self- and Parent Report Measures
  - Obsessive Compulsive Inventory-Revised (OCI-R)
  - Child OCD Impact Scale-Revised (COIS-R)

# CBT Treatment Components

## 1. Improve the child's and parents' understanding of OCD

- Education re: OCD and CBT model
- Map child's OCD symptoms over time and draw connections to triggers (including strep infections, stressors)
- Encourage child to externalize OCD, to understand that people can have random/scary thoughts without them meaning anything
- Description of treatment (initiation to exposure/response prevention)

# CBT Treatment Components

## 2. Cognitive Training

- Conceptualize obsessions as “spam messages”
- Self-statements: “This is just my OCD talking”
- Help children evaluate the evidence for and against their thoughts that something bad will happen and generate other possible explanations

# CBT Treatment Components

## 3. Development of Fear and Avoidance Hierarchies

Example (contamination-related):

Situation	Fear Rating
Allow mom to touch my arm after she touched the kitchen sink, waiting 10 minutes to wash my hands	4
Allow mom to touch my arm after she touched the kitchen sink without washing my hands	5
Touch surface near the kitchen sink without washing my hands	6.5
Touch kitchen sink, waiting 10 minutes to wash my hands	8
Touch kitchen sink without washing my hands	9.5

# CBT Treatment Components

## 3. Fear and Avoidance Hierarchies

Example (confessing):

Situation	Fear Rating
Wait five minutes before confessing to parent	3.5
Wait 30 minutes before confessing to parent	4.5
Make confession without parent responding	6
Refrain from making confession about a “less serious” possible offense	7.5
Refrain from making confession about a more serious potential offense	9

# CBT Treatment Components

## 4. Exposure/Response Prevention

- Begin with least anxiety provoking item on the list, and complete exposure in session (graph SUDS)
- Use imaginal exposure as a step towards an actual exposure, when actual exposure is not feasible, or to address obsessions (imagining the feared scenario)
- Try to practice the exposure until anxiety drops. However, complete reduction in anxiety is not necessary for exposure to be effective-- children are also learning to tolerate distress without engaging in compulsion
- Child practices specified exposures daily (at least a couple times per week) between sessions
- May develop a reward plan, particularly for younger kids



# CBT Treatment Components

## 5. Parent Guidance

- Focus on minimizing accommodation of children's OCD symptoms
- Coaching on how to limit responses to excessive reassurance seeking

# CBT: Research Evidence

- Pediatric OCD Treatment Study (POTS; 2004) is the largest randomized controlled trial to date
  - Children with OCD divided into four treatment groups: CBT only, Zoloft only, CBT+Zoloft, and Placebo
  - Treatment lasted 12 weeks, plus 4 extra weeks for children who did well after 12 weeks
  - Based on reductions in OCD symptoms, children receiving CBT +Zoloft did best, followed by CBT or Zoloft alone, followed by placebo
  - Rates of “clinical remission” were highest for those children who received CBT (either with Zoloft or alone)

# CBT: Research Evidence

- Barrett and colleagues (2004) compared individual Cognitive Behavioral Family Therapy, group CBFT, and waitlist over 14 weeks
  - Results showed the two treatment groups were superior to waitlist at post-treatment and follow-up
- Piacentini and colleagues (2011) compared Family Focused CBT to psychoeducation/relaxation training
  - CBT group showed greater reductions in OCD symptoms and greater decreases in impairment and family accommodation; improvements were maintained at 6 month follow-up

# Intensive CBT

- Intensive CBT contains the same treatment components but treatment is delivered over the course of 1-3 weeks with frequent, longer sessions
- Intensive treatment has been shown to be as effective as weekly CBT, but may lead to more rapid improvement
- Storch and colleagues (2007)
  - 40 children (ages 7-17) with OCD
  - Randomized to 14 sessions of weekly or daily family-based CBT
  - Intensive group fared better immediately post-treatment (rated by clinicians as less ill, higher rates of remission, and greater % considered to be responders)
  - Outcomes were equivalent at three-month follow-up

# Research on CBT for PANDAS?

## Cognitive-Behavioral Therapy for PANDAS-Related Obsessive-Compulsive Disorder: Findings From a Preliminary Waitlist Controlled Open Trial

ERIC A. STORCH, PH.D., TANYA K. MURPHY, M.D., GARY R. GEFFKEN, PH.D.,  
GISELLE MANN, PH.D., MPH, JENNIFER ADKINS, PH.D., LISA J. MERLO, PH.D.,  
DANNY DUKE, B.A., MELISSA MUNSON, B.A., ZOE SWAINE, B.A.,  
AND WAYNE K. GOODMAN, M.D.

### ABSTRACT

**Objective:** To provide preliminary estimates of the effectiveness of cognitive-behavioral therapy (CBT) in treating pediatric obsessive-compulsive disorder (OCD) of the pediatric autoimmune neuropsychiatric disorders associated with streptococcus (PANDAS) subtype. **Method:** Seven children with OCD of the PANDAS subtype (range 9–13 years) were treated in a 3-week intensive CBT program conducted at a university clinic. Six of seven children were taking selective serotonin reuptake inhibitor medication(s) upon presentation. Assessments were conducted at four time points: baseline, pre-treatment approximately 4 weeks later, posttreatment, and 3-month follow-up. Raters were blind to the nature of the study

## Storch et al (2006)

Small, waitlist controlled trial of CBT for 7 children (ages 9-13 years) with PANDAS subtype OCD

- 6/7 were already taking an SSRI medication, which remained stable during CBT
- Children were assessed, waited four weeks, were assessed again, and then completed an intensive CBT program (14 90-minute sessions over the course of three weeks), followed by post-treatment and three-month follow-up assessments
- OCD severity stayed the same after waitlist

# Storch et al (2006): Results

- Post-treatment results
  - 68% reduction in OCD symptoms
  - 86% rated by a clinician (who did not know children's treatment status) as a "treatment responder"
  - 79% no longer met diagnostic criteria for OCD
- Three month follow-up results
  - 46% reduction in OCD symptoms
  - 50% rated by a blind clinician as a "treatment responder"
  - 50% no longer met diagnostic criteria for OCD
- 3 children experienced partial or full relapses by FU, though symptoms remained less severe

# Modifications for PANDAS subtype

1. Do not embark upon CBT at the height of symptoms exacerbation, as children may be too dysregulated to learn skills and engage in exposures. Wait until symptoms are less severe or residual.
2. Use a treatment team approach, including immunologist (when appropriate), psychiatrist, and CBT therapist to promote coordination of care

# Modifications for PANDAS subtype

3. Given intense levels of distress associated with PANDAS, CBT may also include skills to help children regulate emotions, including:
  - Relaxation/imagery training,
  - mindfulness and acceptance skills,
  - distress tolerance (distraction, self-soothing),
  - behavior modification charts administered by parents for oppositional behavior
  - Treatment team approach, including immunologists (when appropriate), psychiatrist, and CBT therapist; coordination of care
4. Booster sessions may be particularly important for children with PANDAS given risk for relapse.



# Case Example

- Paul, age 13

# Local CBT Resources

- Intensive CBT Programs
  - Intensive Outpatient CBT Service in the Child and Adolescent CBT Program at Massachusetts General Hospital
    - Individual three-hour sessions over the course of 2-8 days
    - [http://www.massgeneral.org/psychiatry/services/child\\_cbt\\_intensive.aspx](http://www.massgeneral.org/psychiatry/services/child_cbt_intensive.aspx)
  - Bradley Hospital Intensive Program for OCD
    - Combination of individual and group CBT
    - Three hours a day, five days a week for approximately three weeks
    - [http://www.bradleyhospital.org/The\\_OCD\\_Intensive\\_Outpatient\\_Program.html](http://www.bradleyhospital.org/The_OCD_Intensive_Outpatient_Program.html)
  - McLean Anxiety Mastery Program
    - Intensive group CBT (3 hours/day, 4 days a week for approximately 4 weeks)
    - One day per week of parent guidance and family treatment
    - <http://www.mclean.harvard.edu/patient/child/amp.php>

# Local CBT Resources

- Weekly Outpatient CBT
  - International OCD Foundation referral list:  
[http://www.ocfoundation.org/treatment\\_providers.aspx](http://www.ocfoundation.org/treatment_providers.aspx)
  - MGH Child and Adolescent CBT Program (617-643-9898)
  - Center for Anxiety and Related Disorders at Boston University (617-353-9610)
  - Pediatric Anxiety Research Clinic at Bradley Hospital (401-444-3003)
  - Institute of Living, Hartford Hospital (860-545-7685)