

# OCD in children and adolescents: Assessment, Diagnosis and Cognitive-Behavioral Therapy

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# Outline

- Phenomenology of childhood OCD
- Comorbidity and functional impairment
- Cognitive-Behavior Therapy for OCD and related disorders

# Definitions

- Obsessions

- Recurring thoughts, images or impulses that are difficult to dislodge
- Not worries about everyday life or preoccupations with sad or traumatic life experiences
- Perceived as products of person's own mind

and/or

- Compulsions

- Repetitive behaviors or rituals that the person feels driven to perform

# OCD: diagnostic features

The obsessions and/or compulsions are:

- Recognized as excessive (may be not in very young children)
- Time consuming (> 1 hour/day)
- Source of significant impairment or distress, interfere with daily living
- Level of insight: good/fair, poor, absent

# Note:

- Although OCD used to be classified as an anxiety disorder, not all children describe their symptoms as anxiety-related.
- Many children report engaging in rituals to alleviate feelings of discomfort or the sense that something just doesn't feel right.

# Prevalence of OCD

<u>Age Group</u>	<u>Prevalence</u>
Children ( < 12 years)	0.5%
Adolescents (> 12 years)	2% to 3%
Adults	2% to 3%

# Natural history

- Onset in childhood or adulthood
- Onset may be abrupt or gradual
- Tic-related form emerging as subtype
- Course tends to be waxing and waning and chronic
- Childhood onset and higher level of symptoms severity are associated with poorer outcome

# Course of Childhood onset OCD

## Early studies (NIMH cohort, Leonard 1993)

- Most children continue to meet full or partial OCD criteria
- Earlier onset and greater severity predict poor outcomes
- Symptom number and type were not stable overtime

## Current view (Liu et al, 2021, meta-analysis)

- Rate of remission of pediatric OCD estimated at 62%
- Shorter duration of untreated OCD predicts better outcome



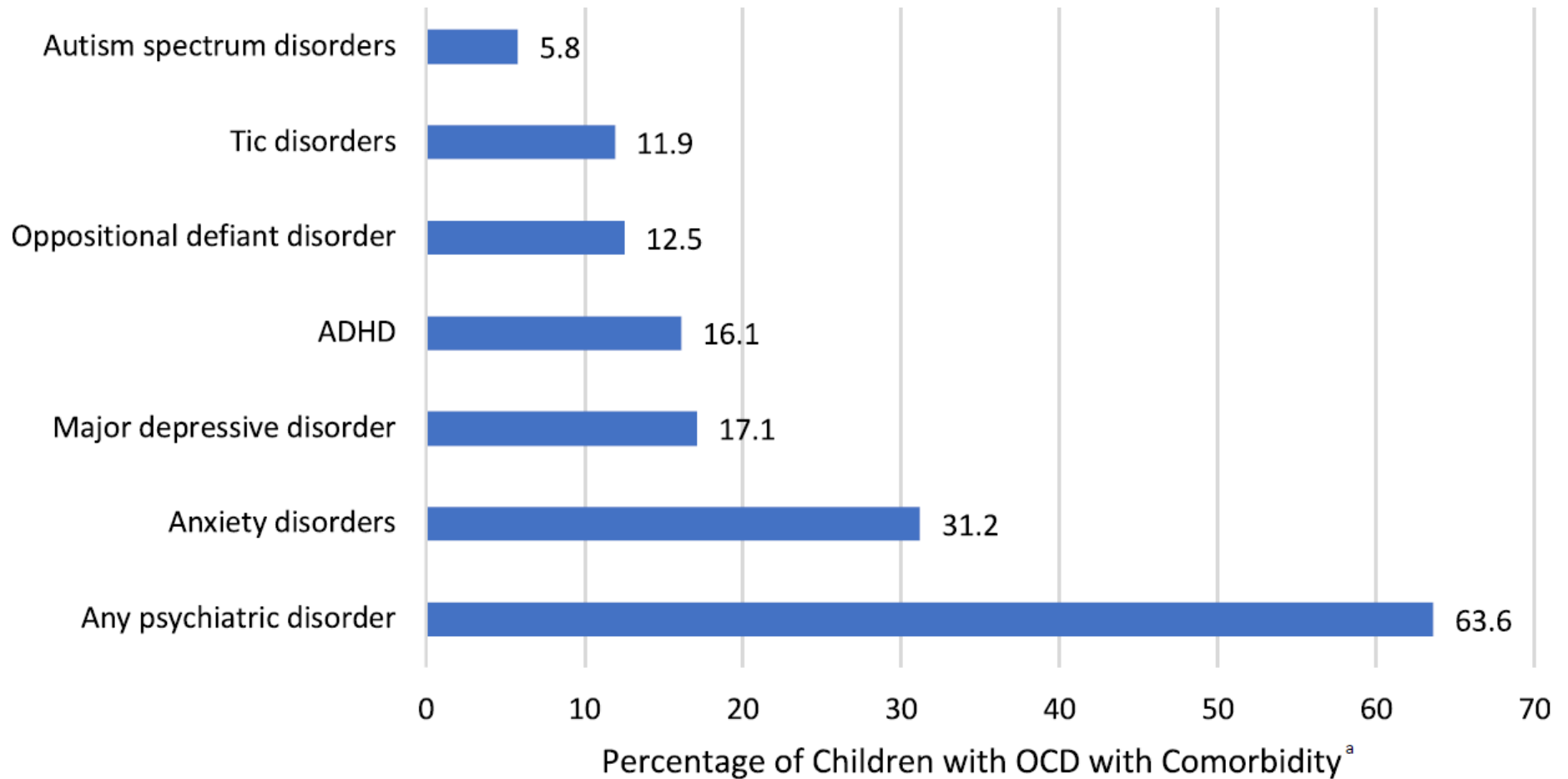
# Common obsessions in children

- **Fear of contamination:** Dirt, germs, odors, chemicals, unwanted characteristics of others
- **Fear of harm:** self or family members, superstitions
- **Fear acting on unwanted impulses:** sudden sexual or aggressive ideas that are bothersome
- **Religious/Moral worries:** doubts about perceived wrongdoing, bad thoughts, need to pray or confess.
- **Need for Symmetry:** need for things to be lined up, over-focus on odd or even numbers

# Common compulsions in children

- **Washing:** hand washing, excessive cleaning, avoiding contact with others or objects
- **Rituals to Prevent Harm:** touching, tapping, staring, counting, retracing steps, walking in patterns
- **Seeking Reassurance:** that harm has not/will not occur, that wrongdoing has not been committed
- **Ordering/Arranging:** making things even or perfect or according to certain rules (rewriting to make perfect)
- **Repeating Routine Behavior:** to achieve sense of completion, not to prevent harm, or get rid of bad thoughts

# Comorbidity in child OCD



# Functional impairment in OCD

- 151 children with OCD, aged 5 to 17
- Problems due to OCD (%): Parent vs Child report
  - Doing homework 46 32
  - Concentrating on schoolwork 47 37
  - Getting dressed in the morning 33 18
  - Bathing/grooming in the morning 36 25
  - Doing household chores 33 30
  - Getting ready for bed at night 42 28
  - Getting along with parents 36 18
  - Getting along with siblings 26 19

# Impairment in OCD plus ADHD

## *Child Behavior Checklist*

### Activities competence scale

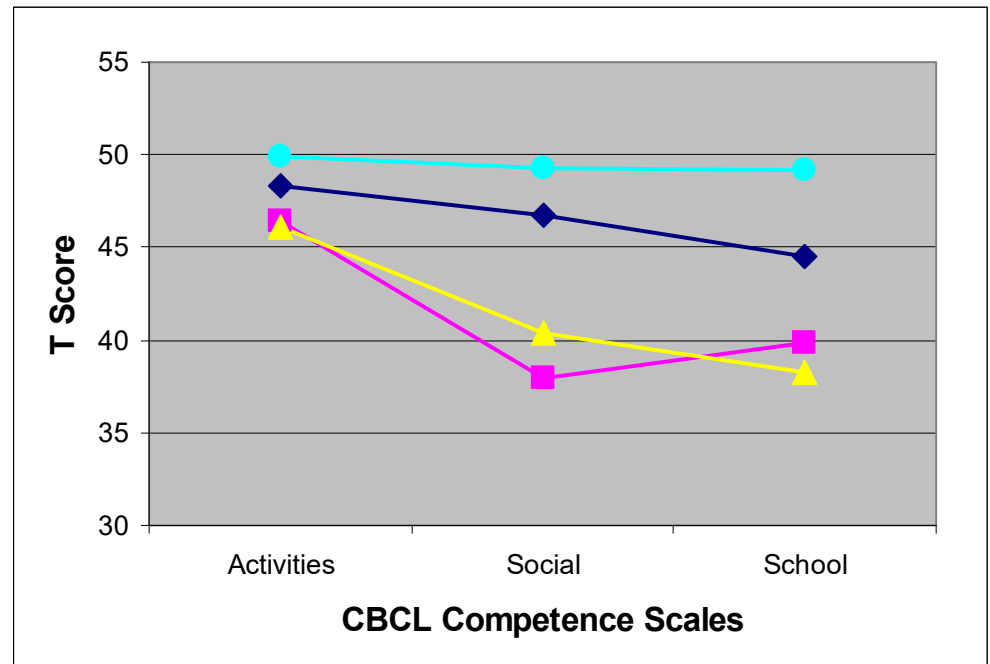
reflects the number of sports, hobbies and clubs in which the child participates.

### Social competence scale

assesses the number of friends, time spent with friends, and the extent to which the child gets along with peers.

### School competence scale

is a parent report of the child's grades in academic subjects and history of special education services, repeated grades or school problems.



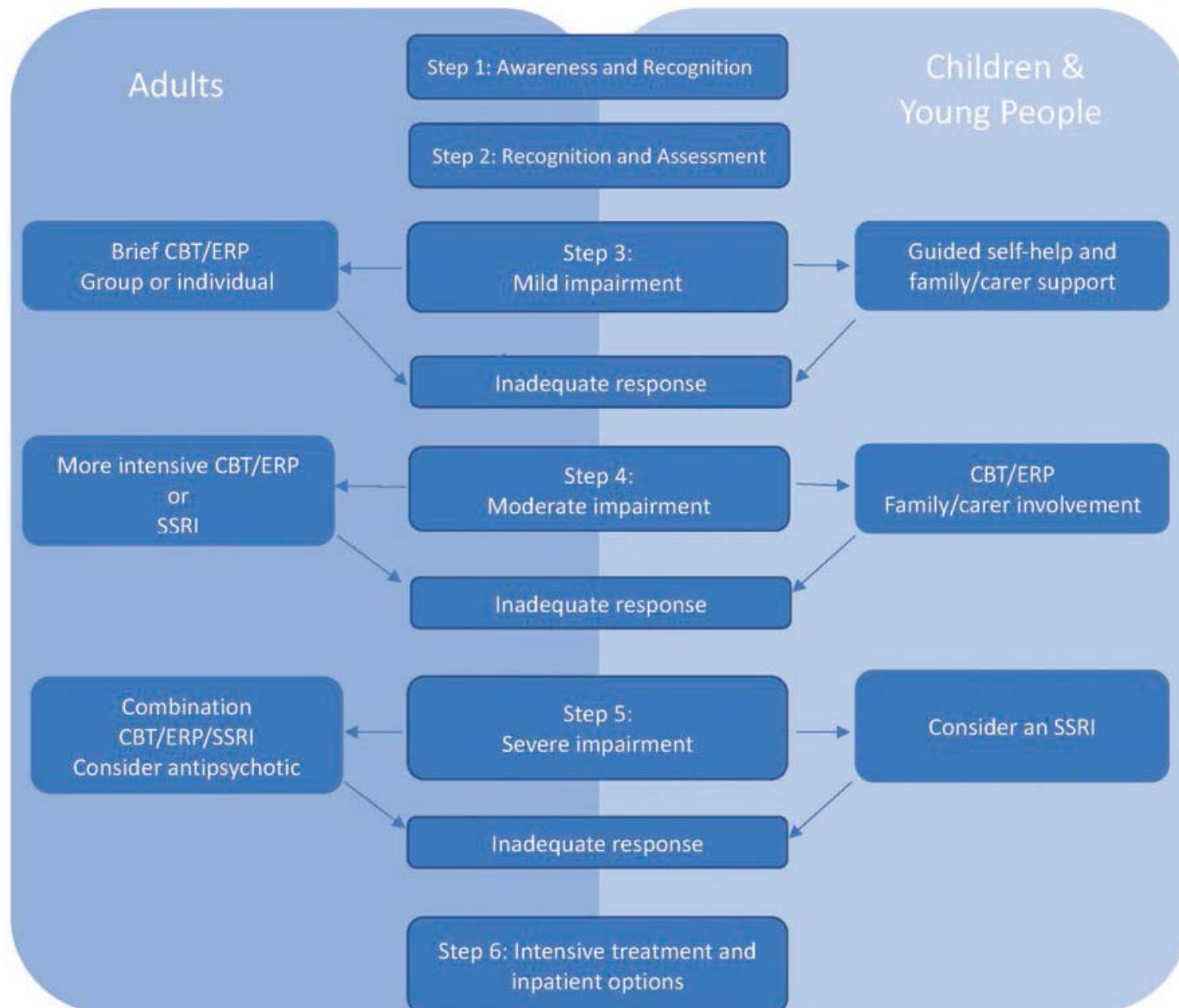
◆ OCD ■ OCD+ADHD ▲ ADHD ● NC

Sample: 287 children and adolescents between the ages of 7 and 18. 56 with OCD-only; 43 with OCD+ADHD; 95 with ADHD; and 93 unaffected controls children.

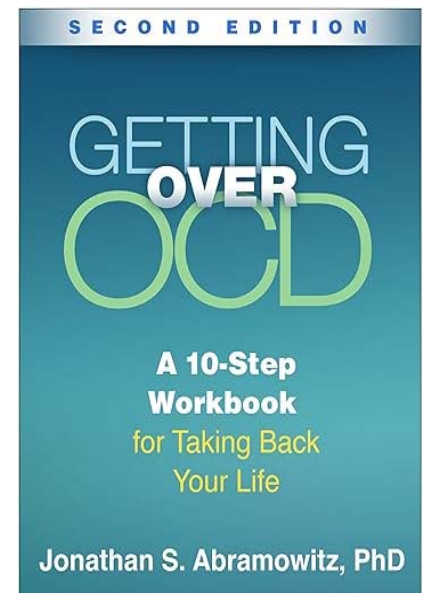
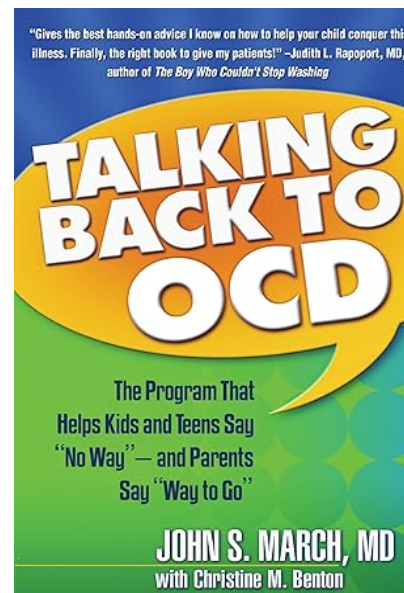
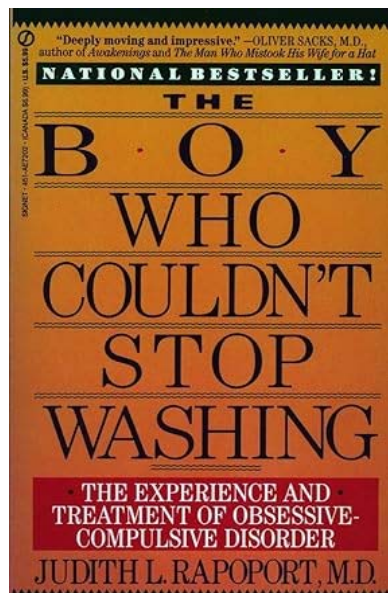
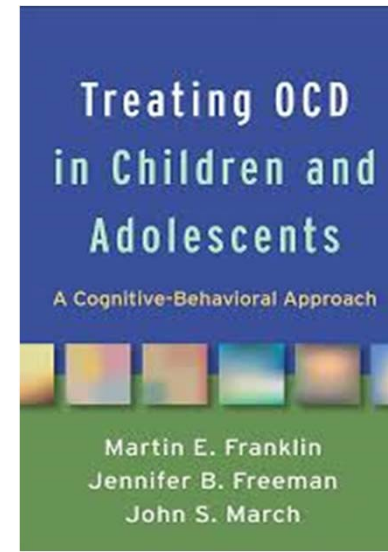
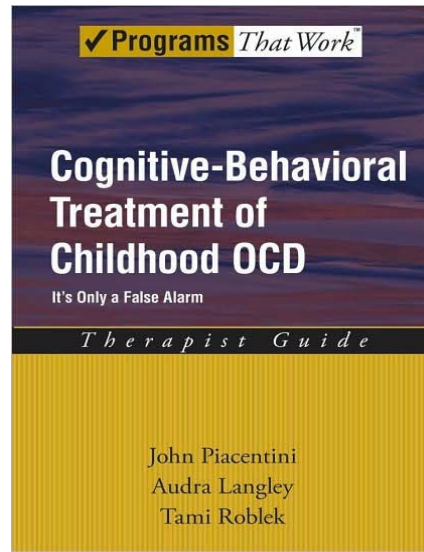
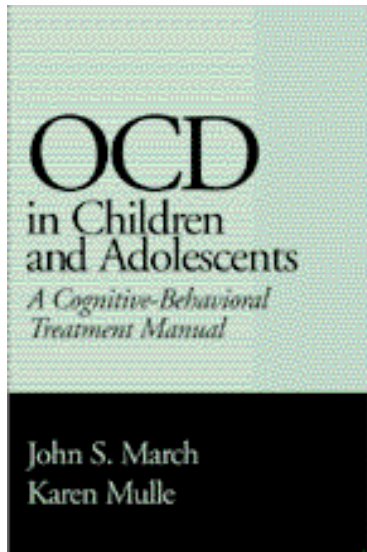
# Diagnostic assessment of OCD

- Clinical interview with parent and child
- Past and current OCD symptoms, age of onset
- Severity of OCD
  - Time occupied, degree of interference, subjective distress, resistance, control
- Functional impairment
  - School, family, social domains
- Co-occurring disorders
  - Anxiety, depression, ADHD
- Differential diagnosis
  - Tourette Syndrome, Autism, Separation Anxiety

# Treatment planning



# CBT treatment manuals for OCD





# Medication for OCD

## APPROVED MEDICATION RANGES FOR OBSESSIVE-COMPULSIVE DISORDER IN CHILDREN AND ADOLESCENTS

Medication	Starting Dose (mg) <sup>a</sup>	Normal Range (mg) <sup>a</sup>	Maximum Dose (mg)
Sertraline	25	25 to 200	250
Fluoxetine	10	20 to 80	80
Fluvoxamine	25	50 to 200 <sup>b</sup> ; 50 to 300 <sup>c</sup>	300
Clomipramine	6.25 to 25	100 to 200	200

<sup>a</sup> Per Stahl (2019).

<sup>b</sup> Child.

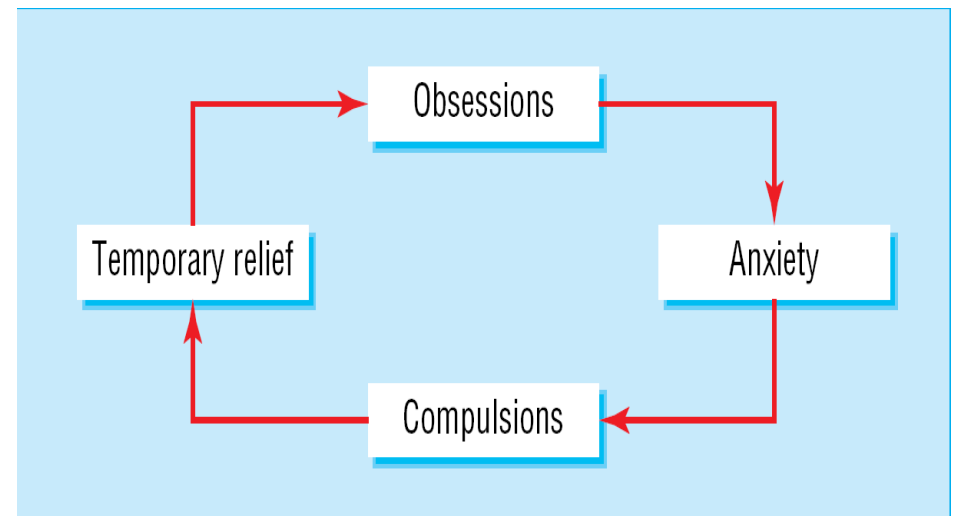
<sup>c</sup> Adolescent.

# CBT for OCD

- Psychoeducation
  - Describing the prevalence of OCD can help to reduce feeling of embarrassment and stigma about being different from others or “the only one in the world with this problem.”
  - Presenting the concept of OCD as a neurobehavioral disorder can reduce feelings of blame and conflict among family members who may perceive child’s symptoms as intentional.

# OCD cycle

- Obsessions - unwanted, intrusive thoughts lead to an increase in anxiety.
- Compulsions - ritualistic behaviors (including mental rituals) provide an escape from or reduction in anxiety.
- Performance of rituals interferes with the extinction of anxiety because by escaping, the individual fails to learn that his or her fears are unrealistic.
- Moreover, rituals are negatively reinforced by the immediate sense of anxiety reduction that results in their wake.

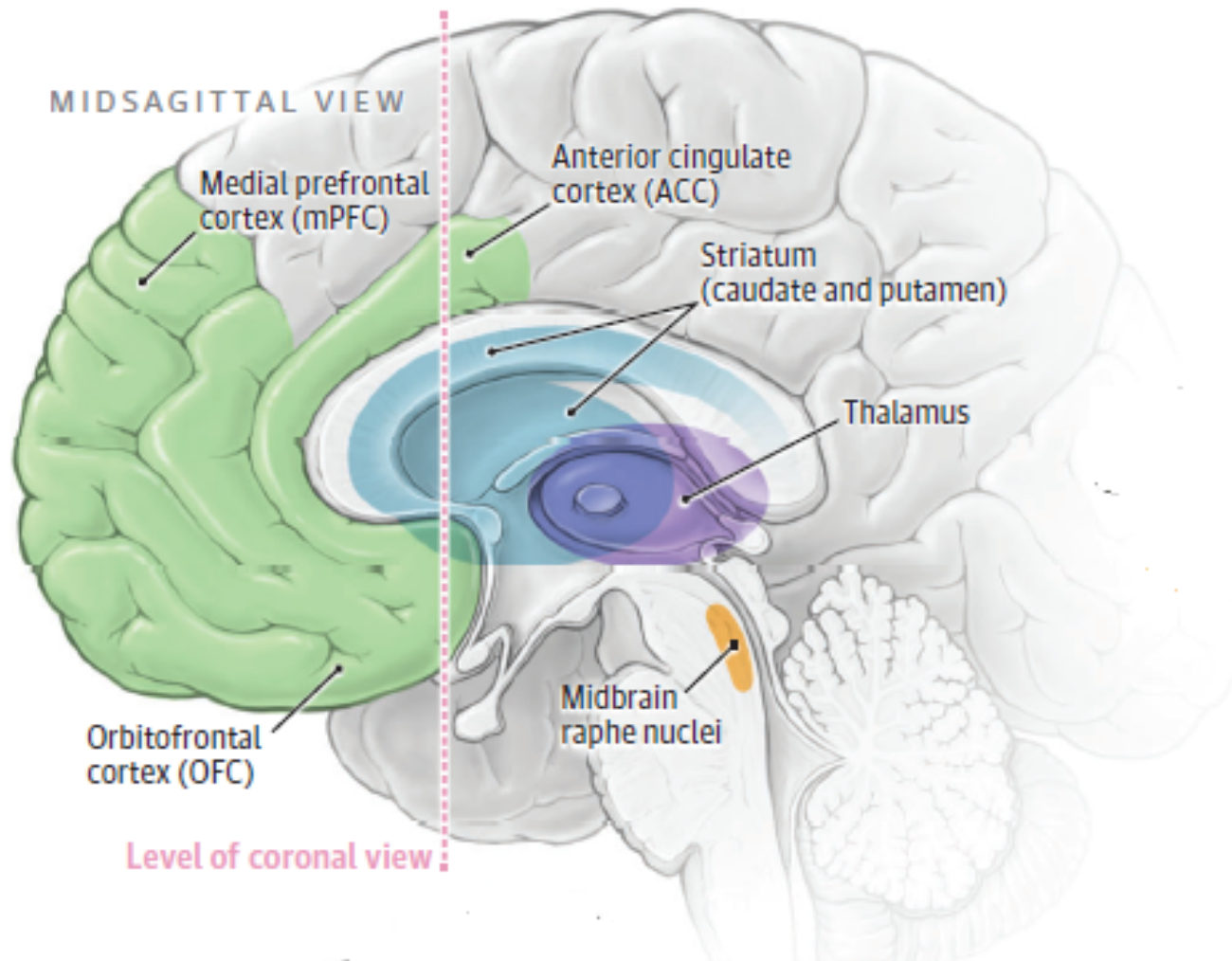


Hierarchy for Different Thoughts

Anxiety Level	Thought
2	Shouting rude words
3	Pushing someone when walking in the street
5	Punching someone in the face
7	Attacking someone with a knife
8	Going completely crazy, going on a rampage and killing a lot of people

# Brain mechanisms of OCD

## Anatomy of cortico-striato-thalamo-cortical (CSTC) loop circuitry



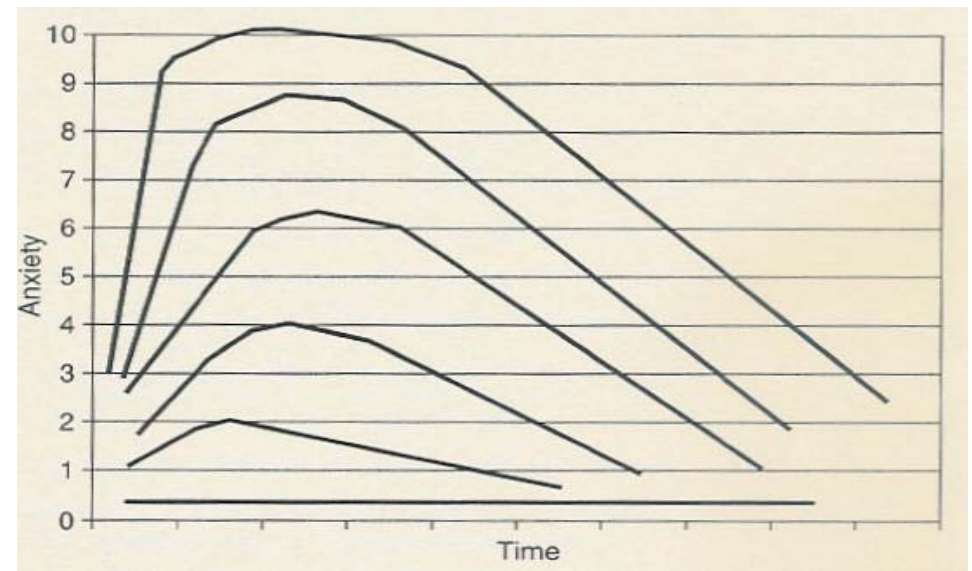
# CBT for OCD: Metaphors

- False Fire Alarm – “OCD is just like a false fire alarm. When you start to worry about germs, it’s like a fire alarm going off – you feel nervous and think something bad is going to happen. However, just like the false alarm, nothing bad is going to happen. In treatment, you will learn that your OCD fears are like false fire alarms and that if you ignore them, they will go away and nothing bad is going to happen.”

*Piacentini et al., 2007*

# Exposure and Response Prevention

- **ERP** aims to weaken the pattern of anxiety reduced by rituals creating negative reinforcement.
- **Exposure** - prolonged and repeated confrontation with obsessional stimuli, weakens connections between intrusive thoughts and anxiety.
- **Response prevention** - refraining from ritualistic behavior, is aimed at weakening the pattern of relying on rituals to reduce anxiety.
- **Habituation** - as anxiety naturally dissipates with time without rituals, the patient learns that compulsive rituals are not necessary to reduce anxiety.



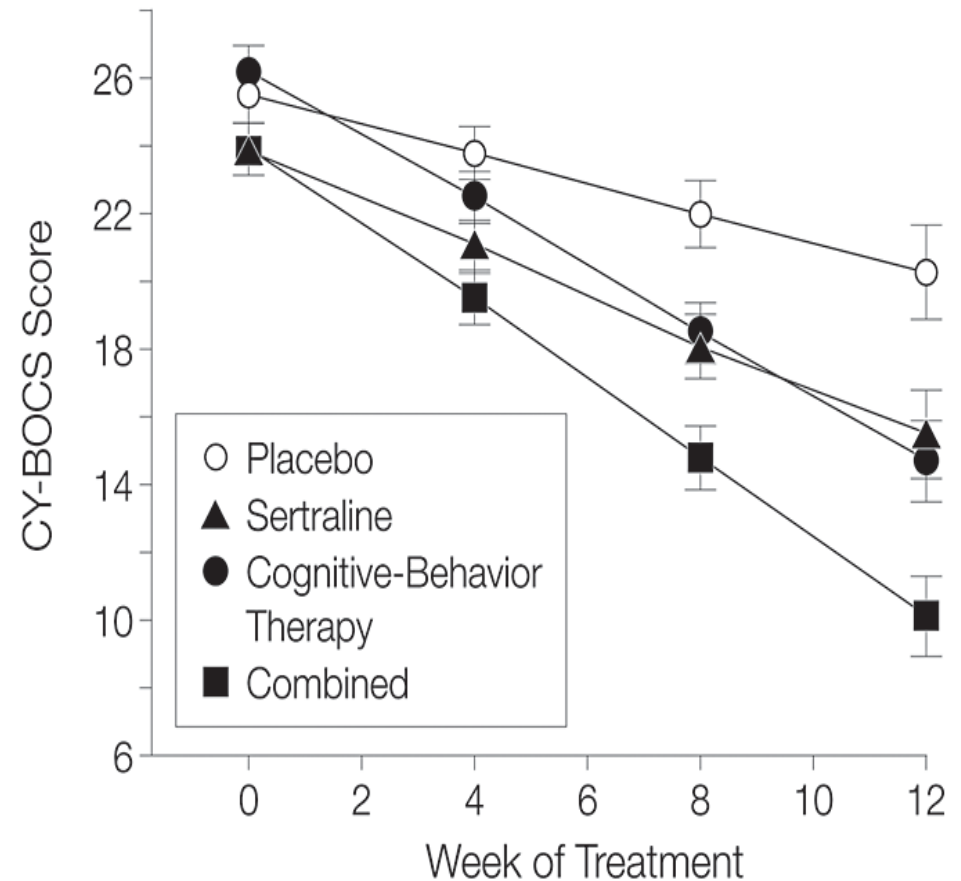
# Pediatric OCD Treatment Study POTS-I

**Design** Randomized controlled trial with 112 children aged 7 through 17 years with a primary diagnosis of OCD and a CY-BOCS score > 16.

**Interventions** CBT alone, sertraline alone, combined CBT and sertraline, or pill placebo for 12 weeks.

**Main Outcome Measures** Change in CY-BOCS score over 12 weeks as rated by an independent evaluator; rate of clinical remission defined as a CY-BOCS score  $\leq 10$ .

**Results** 97 of 112 patients (87%) completed the study. The rate of clinical remission for combined treatment was 53.6%; for CBT alone, 39.3%; for sertraline alone, 21.4%; and for placebo, 3.6%. ES for Comb, CBT and sertraline were 1.40, 0.97 and 0.67.



# Summary

- Pediatric OCD is a common and impairing disorder that often co-occurs with other psychiatric conditions
- Exposure and response prevention is the first line of treatment that can be helpful to most children with OCD
- Co-occurring disorders and areas of functional impairment may require separate interventions



# Thank you!

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For clinic services at the Yale Child Study Center Outpatient Clinic OCD program  
please call (203) 785-2540