The Society for Clinical Child and Adolescent Psychology (SCCAP): Initiative for Dissemination of Evidence-based Treatments for Childhood and Adolescent Mental Health Problems

With additional support from Florida International University and The Children’s Trust.
Keynote
Evidence-based Treatment of Obsessive Compulsive Disorder in Children and Adolescents

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UCLA Semel Institute for Neuroscience and Human Behavior
Disclosure

Royalties for Treatment Manual and Child Workbook from Oxford University Press
OBSESIONS

- Unwanted, repetitive, intrusive thoughts, impulses, images
- Cause marked distress
- Not simply excess worries about everyday topics
- Individual attempts to ignore, neutralize or suppress
- Usually recognized as product of one’s own mind
I just know I left the oven on.
I just know I left the computer on.
COMPULSIONS

• Repetitive behaviors or mental acts conducted in response to obsession
• Typically performed in stereotypic or rule-bound fashion
• Behavior logically unrelated to obsessive fear or else completed in manner out of proportion to fear
• Aimed at reducing stress or preventing dreaded event
OCD Diagnostic Criteria
Features in Childhood

Obsessions
- May be less well-formed in children than adults
- “Bizarre” easily misdiagnosed

Accompanying Feelings
- Fear/Anxiety, Doubt, Disgust, Unacceptable urges, Sensory Incompleteness
Checking Compulsions

Strike a match, Ernie. I need to check and see if I remembered to turn off the lights.
Children and adolescents do not need to recognize that symptoms are excessive or unrealistic

Symptoms must be:

- Distressing,
- Interfering, or
- Time consuming

Not due to another Axis I disorder or general medical condition
# Obsessions and Compulsions

<table>
<thead>
<tr>
<th>OBSESSION</th>
<th>COMPULSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contamination</td>
<td>Washing / Cleaning</td>
</tr>
<tr>
<td>Concern about Harm</td>
<td>Checking / Others</td>
</tr>
<tr>
<td>Need for Symmetry</td>
<td>Arranging / Tapping</td>
</tr>
<tr>
<td>Fear of losing things</td>
<td>Hoarding</td>
</tr>
<tr>
<td>Fear of embarrassment</td>
<td>Avoidance</td>
</tr>
<tr>
<td>“Just Right” Phenomenon</td>
<td>Repeating</td>
</tr>
<tr>
<td>Moral obsessions</td>
<td>Confessing / Telling</td>
</tr>
</tbody>
</table>
Clustering of Symptoms

Hasler et al. (2007)
Major Symptom Factors of OCD

- Aggressive / harm obsessions & checking compulsions
- Contamination obsessions & cleaning compulsions
- Symmetry / order obsessions & arranging / precision compulsions
- Saving / collecting obsessions & hoarding / saving compulsions
- Sexual/religious obsessions & mental compulsions

(Leckman et al, 1997; Summerfeldt et al, 1999; Calamari et al, 1999)
Childhood OCD

- 1-3% prevalence
- More common in boys prepubertally
- Onset may be abrupt or gradual
- Onset or exacerbation may be related to psychosocial trauma or stress in some cases
- Symptoms may wax and wane or be chronic and progressive
- Child may be able to ignore/resist symptoms at times (e.g., with friends, at school)
- Symptoms worse when child sick, stressed, or tired
- Variable course: 41% full-OCD after 1-15yr FU; 60% at least some symptoms (Stewart et al., 2004)
OCD-Related Functional Impairment

• One of 10 most disabling medical conditions worldwide (Murray and Lopez, 1996)

• 151 OCD youngsters and their parents completed parallel self-report rating scale (COIS) assessing OCD-related dysfunction in three areas: home/family, school, and social

• 88% of parents and 85% of children reported at least one area of significant OCD-related dysfunction.

• Half of sample reported significant OCD-related dysfunction at home, in school, and socially.

• Parents more likely to report home/family problems, children more likely to report problems related to mental rituals.

Piacentini et al., 2003
## Most Common Problems

### Parent Report

<table>
<thead>
<tr>
<th>Problem</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrating on school work</td>
<td>72%</td>
</tr>
<tr>
<td>Doing homework</td>
<td>68%</td>
</tr>
<tr>
<td>Doing assigned chores at home</td>
<td>67%</td>
</tr>
<tr>
<td>Getting ready for bed at night</td>
<td>66%</td>
</tr>
<tr>
<td>Getting along with parents</td>
<td>66%</td>
</tr>
<tr>
<td>Bathing / grooming in the morning</td>
<td>62%</td>
</tr>
<tr>
<td>Getting dressed in the morning</td>
<td>60%</td>
</tr>
<tr>
<td>Getting to school on time</td>
<td>59%</td>
</tr>
<tr>
<td>Taking tests</td>
<td>59%</td>
</tr>
<tr>
<td>Completing in-class work</td>
<td>57%</td>
</tr>
<tr>
<td>Sleeping at night</td>
<td>56%</td>
</tr>
<tr>
<td>Getting along with sibs</td>
<td>55%</td>
</tr>
</tbody>
</table>

Piacentini et al., 2003
<table>
<thead>
<tr>
<th>Problem</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrating on school work</td>
<td>64%</td>
</tr>
<tr>
<td>Letting others touch / use things</td>
<td>62%</td>
</tr>
<tr>
<td>Doing homework</td>
<td>60%</td>
</tr>
<tr>
<td>Being with a group of strangers</td>
<td>56%</td>
</tr>
<tr>
<td>Completing in-class work</td>
<td>55%</td>
</tr>
<tr>
<td>Getting ready for bed at night</td>
<td>54%</td>
</tr>
<tr>
<td>Bathing/grooming in morning</td>
<td>52%</td>
</tr>
<tr>
<td>Doing assigned chores at home</td>
<td>52%</td>
</tr>
<tr>
<td>Sleeping at night</td>
<td>49%</td>
</tr>
<tr>
<td>Getting along with parents</td>
<td>49%</td>
</tr>
<tr>
<td>Getting to school on time</td>
<td>48%</td>
</tr>
<tr>
<td>Writing in class</td>
<td>48%</td>
</tr>
<tr>
<td>Taking tests</td>
<td>46%</td>
</tr>
</tbody>
</table>

Piacentini et al., 2003
# OCD-Related Impairment

## Parent-Child Differences

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Problem</td>
<td>Slight Problem</td>
<td>Significant Problem</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Problems at School</td>
<td>20</td>
<td>36</td>
<td>44</td>
</tr>
<tr>
<td>Problems socially with friends</td>
<td>46</td>
<td>35</td>
<td>19</td>
</tr>
<tr>
<td>Prevented from going places</td>
<td>48</td>
<td>32</td>
<td>20</td>
</tr>
<tr>
<td>Problems at home/with family</td>
<td>23</td>
<td>29</td>
<td>48</td>
</tr>
</tbody>
</table>

**GLOBAL PROBLEM RATINGS**

*** p < .001

Piacentini et al., 2003
Comorbidity in Childhood OCD

<table>
<thead>
<tr>
<th>Disorder</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Anxiety Disorders</td>
<td>47</td>
<td>42.0</td>
</tr>
<tr>
<td>ADHD</td>
<td>22</td>
<td>19.6</td>
</tr>
<tr>
<td>ODD/CD</td>
<td>10</td>
<td>8.9</td>
</tr>
<tr>
<td>Tic Disorders</td>
<td>12</td>
<td>10.7</td>
</tr>
<tr>
<td>MDE/Dysthymia</td>
<td>12</td>
<td>10.7</td>
</tr>
<tr>
<td>One Comorbid Disorder</td>
<td>82</td>
<td>73.2</td>
</tr>
<tr>
<td>Multiple Comorbid</td>
<td>35</td>
<td>31.3</td>
</tr>
</tbody>
</table>

(N=112) UCLA Child OCD Program
OCD Neurobiology

- Serotonin Hypothesis: SSRI efficacy, but 5-HT and metabolites not found to consistently differ between OCD and normals in CSF or peripherally.

- 5-HT binding studies suggest impaired 5-HT binding may play a role in OCD pathogenesis.

- Mixed evidence for dopaminergic involvement. Increased dopamine transmission in basal ganglia may relate to hyperactivity of cortico-striato-thalamo-cortico circuit.
Cortico-Striatal-Thalamic Model

- Circuit possibly involved in regulation of repetitive thoughts and behaviors: underactive caudate nuclei so that thoughts, actions generated by orbitofrontal cortex are not suppressed.
Baseline Glucose Metabolism in OCD

Schwartz, 1996
OCD Neuroanatomy

- Increased glucose metabolism or other indices of activation in the orbitofrontal cortex and caudate nuclei

- Normalizes with behavioral and pharmacological treatment (Schwartz et al., 1996)

- Part of a circuit possibly involved in regulation of repetitive thoughts and behaviors: underactive caudate nuclei so that thoughts, actions generated by orbitofrontal cortex are not suppressed
Change in Glucose Metabolism Pre/Post CBT

Schwartz, 1996
OCD Neuropsychology

- Deficits in systems subserved by dorsal and ventral corticostriatal circuitry

- Executive function: set-shifting, spatial working memory (DLPFC); alternation tasks, decision-making (OFC)

- Cognitive flexibility, reversal learning?

- Methodologic problems (small N, heterogeneous samples) limit conclusions that can be drawn
Family studies show rates of OCD significantly greater in relatives of probands vs. controls (12% vs 2%) (Pauls et al., 1995)

- Familiality increases with increased homogeneity of proband symptom type (e.g., cleaning, hoarding, etc.)
- GAD and agoraphobia show strong association to OCD phenotype (family rates remain elevated when dx controlled for in probands)
- Major depression elevated in relatives but likely secondary to OCD
- Perhaps predisposition for anxiety, not specific dx, is inherited
- Tics and earlier onset age associated with higher rates (esp in combination)

Nicolini et al (2009)
OCD Genetics

- Segregation analyses suggest evidence for both single and polygenic inheritance
  - Ordering and symmetry, OCD with eating disorder, early onset age – Autosomal Dominant

- Candidate gene studies:
  - COMT, MAO-A, Dopamine transporters and receptors – studies typically small with mixed results.
  - More evidence for SERT (serotonin transporter) and 5-HT receptor genes
  - Glutamate transporter SLC1A1 has been associated with OCD in multiple studies

Nicolini et al (2009)
Pediatric
Autoimmune
Neuropsychiatric Disorders
Associated with Strep
PANDAS Diagnostic criteria

- Presence of obsessive-compulsive disorder and/or a tic disorder
- Pediatric onset of symptoms (age 3 years to puberty)
- Episodic course of symptom severity
- Association with group A Beta-hemolytic streptococcal infection (a positive throat culture for strep or history of Scarlet Fever)
- Association with neurological abnormalities (motoric hyperactivity, or adventitious movements, such as choreiform movements)
Strep + OCD = PANDAS?

- NO
  - Almost all school aged children get strep throat at some point in their lives.
  - The average child has 2-3 strep throat infections each year.
  - PANDAS is considered only when there is a very close relationship between the abrupt onset or worsening of OCD and/or tics, and a preceding strep infection.
  - If strep is found in conjunction with two or three episodes of OCD/tics, then it may be that the child has PANDAS.

- PANDAS IS NOT A VALIDATED DISORDER

http://www.nimh.nih.gov
What to do for PANDAS

OCD

• Treat the OCD symptoms according to best practice standards

Strep infection

• Treat the strep infection according to best practice standards

http://www.nimh.nih.gov
What not to do for PANDAS

- Steroids
- Plasmapheresis
- Intravenous immunoglobulin
- Antibiotic prophylaxis

http://www.nimh.nih.gov
Cognitive Aspects of OCD
Intrusive Mental Processes

- 80-90% community experience occasional intrusive thoughts
- Similar in content to obsessions from patient samples (e.g., Rachman & de Silva, 1978)
- Exacerbated by stress but subside
Cognitive Biases in Adult OCD

Thought-Action Fusion
Individuals with TAF:

- Experience thoughts and actions about harm as equivalent (thinking it is same as doing it)
- Believe that having an intrusive negative thought is as wrong as acting it out (thinking it is as bad as doing it)

Exaggerated Responsibility

- Failing to prevent or trying to prevent harm to others is the same as having caused harm
- Responsibility is not attenuated by low probability of occurrence

(Rachman, 1993)
Cognitive Processes in Child OCD

Barrett & Healy, 2002

- OCD children report higher levels of responsibility, probability of harm and severity, thought action fusion, and less cognitive control compared to nonclinic comparison children.

- OCD children only reported less cognitive control than anxious comparison children.

- Specificity of cognitive biases to OCD is questionable in children. May be developmental phenomenon.
Cognitive Processes in Child OCD

Barrett & Healy, 2004

- Experimental manipulation of responsibility during BAT.
  - Manipulation inflated perceived responsibility for harm in OCD children
  - However, this did not lead to increases in estimated probability or severity of harm or distress.
- CBT led to significant decreases in perceived responsibility for harm, probability and severity of harm, and distress.
- Although CBT effective in addressing responsibility, this bias may not be as important in child OCD versus adult disorder.
Obsessive Compulsive Cycle
Obsessive Compulsive Cycle

**Obsessions**
Intrusive, repetitive negative images or impulses

**Distress**
Anxiety, fear, disgust or shame

**Relief**
Distress subsides temporarily

**Compulsions**
Repetitive thoughts images or actions

**Trigger**

**Negative Reinforcement**
Assessment of Childhood OCD
Accurate Diagnosis of OCD in Youth

- Young children tend to think in the moment and hence misrepresent symptoms or severity
- Adolescents may under-report symptoms (especially boys)
- The nature of certain symptoms (otherwise normative behaviors) leads to misdiagnosis or being missed completely
- Accurate diagnosis in youth is dependent upon both child/adolescent AND parent report (DiBartolo, Albano, Barlow & Heimberg, 1998)
Assessment of Childhood OCD

GOALS
• Determine baseline severity
• Identify comorbidities and other complicating factors
• Monitor response to treatment

CONSIDERATIONS
• Secretive nature of symptoms
• Multiple informants
• Developmental issues
• Family assessment
Assessment of OCD

Diagnostic Interview Schedules
  • Provides reliable differential diagnoses

Behavioral Assessment Techniques
  • Fear and Avoidance Hierarchies
  • Behavioral Avoidance Tasks

Questionnaires
  • Self-Report; Parent-Report; Teacher Ratings
Differential Diagnosis

Other Anxiety Disorders
  GAD, SAD, Panic

Pervasive Developmental Disorders
  Asperger's Syndrome

Tic Disorders
  Compulsion vs. Complex Motor Tic

Other Disorders
Children’s Yale-Brown Obsessive Compulsive Scale (CYBOCS)

10 Items
   5 items on Obsessions Subscale
   5 items on Compulsions Subscale

Each item scored 0 - 4
   20 Point Maximum for Obsessions
   20 Point Maximum for Compulsions

Total Score ranges from 0-40

CYBOCS ge 15  →  clinically significant OCD
CY-BOCS: Checklist Categories

- Washing/Cleaning
- Checking
- Repeating
- Counting
- Ordering/Arranging
- Hoarding/Saving
- Excessive Games/Superstitious Behaviors
- Rituals Involving other persons
- Sexual Obsessions
- Somatic obsessions
- Aggressive Obsessions
- Miscellaneous
Child OC Impairment Scale (COIS-R)

• Measure of OCD-specific impairment
• Parallel Child/Adult Versions
• Covers School, Social, Home
• Good psychometrics
• Useful in helping break down child resistance to treatment

Piacentini et al., 2007
Summary of Child Assessment

Multi-informant:
• child, parent, teacher

Multi-method:
• Self-report, clinician driven, behavioral, observational

Developmentally sensitive
Ongoing through treatment
OCD Treatment Planning

Assessment

1. OCD Symptoms, Severity, Impairment
2. Comorbid Disorders

Treatment Planning

1. Effective vs. ineffective treatments
2. Assess insight and motivation
3. Determine most appropriate treatment setting
4. Assess need for combined medication and CBT
5. Prioritize treatment of comorbid disorders
6. Address family and environmental factors

Education: patient, family, etc.
Cognitive Behavioral Treatment of Childhood OCD
CBT Program for Childhood OCD

- **Psychoeducation** - to reduce blame, stigma, anxiety
- **Assessment** - “Fear Thermometer” to create sx hierarchy
- **Graded Exposure**
- **Response Prevention**
  - to address “core” OCD symptoms
- **Use of Graphics** - visual record of progress
- **Reward Program** - motivation and address comorbidity
- **Cognitive Restructuring** - to manage anxiety and obsessions
- **Homework** - to foster generalization
- **Family Work** - to foster maintenance of tx gains
CBT Program for Childhood OCD

- **Psychoeducation** - to reduce blame, stigma, anxiety
- **Assessment** - “Fear Thermometer” to create sx hierarchy
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- **Family Work** - to foster maintenance of tx gains

...to address “core” OCD symptoms
Psychoeducation

GOALS: Reduce stigma, blame, and anxiety

Prevalence
- Common Disorder (0.5 - 2%)

Neurobiological Framework
- “Asthma” analogy

Ethological Perspective
- Anxiety as “False Alarm”
Anxiety has been conserved as an evolutionary trait across species because it serves a protective function.
Fire Drill Analogy

The fire alarm is scary sounding to get your attention and make you leave the school building in case there’s a fire.

But sometimes the alarm goes off when there’s no fire (a false alarm). It still sounds scary, even though there’s no real danger.

OCD is like a false fire alarm. It makes you scared even when there’s no real danger. In treatment you will learn how to ignore your OCD false alarm so it doesn’t bother you anymore.
OCD Habituation - 1

![Graph showing OCD habituation over time with a peak and decline.](image-url)
OCD Symptom Hierarchy

Fear Thermometer (SUDS)

<table>
<thead>
<tr>
<th>Situation</th>
<th>SUDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking through kitchen door</td>
<td>10</td>
</tr>
<tr>
<td>Checking locks at night</td>
<td>9</td>
</tr>
<tr>
<td>Turning TV on and off (3 times)</td>
<td>6</td>
</tr>
<tr>
<td>Flipping lightswitch (3 times)</td>
<td>6</td>
</tr>
<tr>
<td>Erasing/Rewriting Homework</td>
<td>4</td>
</tr>
<tr>
<td>Brushing teeth</td>
<td>3</td>
</tr>
<tr>
<td>Throwing away old homework</td>
<td>2</td>
</tr>
</tbody>
</table>
Obsessions
Repetitive negative, images or impulses

Distress
Anxiety, fear, disgust or shame

Relief
Distress subsides temporarily

Compulsions
Repetitive thoughts images or actions

Negative Reinforcement Cycle
Exposure Plus Response Prevention (ERP)

EXPOSURE

• Begin with item low on Symptom Hierarchy
• Therapist models behavior first

RESPONSE PREVENTION

• Individual encouraged to resist ritualizing
• Assess SUDS (anxiety) level at frequent intervals
• Continue exposure until anxiety decreases > 50% from peak
• Repeat exercise as often as possible in session
Writing Crooked

This is my handwriting
Within and between session habituation does not predict anxiety reduction over time in adults.

Length of fear expression predicts extinction learning.

**Treatment Implications**

- Exposure goal: sustained fear tolerance not fear reduction
- Patient expectations about exposure
- Unpredictability of exposure (e.g., symptom grab bag)
- Sustained exposure
- Developmental considerations

**Unclear if this applies to younger children**
Cognitive Restructuring

Externalize: Recognize and Relabel Fears as OCD
  • “I won’t get sick if I touch this, it's just my OCD talking”

Reality Testing
  • Challenge irrational beliefs

Mindfulness-based Approaches
  • Neutral, non-affective reaction to symptoms and fear

Learn to Tolerate Uncertainty
  • Bad things do happen, just not very often
Exposing Obsessive Thoughts

Write the OCD thought you are going to work on here:

The following list contains a number of different ways you can expose this thought. There are a few blank spaces at the bottom in case you and your therapist come up with some additional ideas. Now rank the exposures in order from easiest to hardest, starting with the number 1.

Rank (1 is easiest) Exposure List

Imagine the thought
Write the thought
Draw a picture of the thought
Say the thought out loud
Tell the thought to my therapist
Show my therapist a picture of the thought
Have my therapist read my description of the thought
Sing the thought
Record the thought and listen to it
Homework

How Often

• Daily for 30-45 minutes or until anxiety disappears

What is Practiced

• Situations covered in session
• Situations unable to be covered in session

Reviewed in Session

Covered by Reward Program
Reward Program

How Often

• Younger children or more difficult tasks require more frequent rewards

What Gets Rewarded

• Effort not results
• Clearly defined behaviors

Selecting a Reward

• Desired, strong, realistic
Family Factors in Childhood OCD
Treatments for child OCD typically do not lead to symptom remission
POTS I: Symptomatic at Post-Tx (CYBOCS > 10)

<table>
<thead>
<tr>
<th>Treatment Group</th>
<th>Combo</th>
<th>CBT</th>
<th>SSRI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>46%</td>
<td>61%</td>
<td>79%</td>
</tr>
</tbody>
</table>

POTS Team, 2004
Predictors of Worse CBT Response

Adult Studies

- Comorbidity
- Motivation
- Fixity of Beliefs
- Family Factors
  - Expressed Emotion
  - Patient expectation of criticism

Abramowitz et al. (2000); Chambless et al. (1999); Foa et al. (1997)
Predictors of Worse CBT Response

Child/Adolescent Studies

- More severe OCD
- Poorer psychosocial functioning
- Family history of OCD
- Family factors
  - Overall family dysfunction
  - Parental blame/criticism
  - Poorer family cohesion
  - Higher family conflict

Barrett et al. (2005); Piacentini et al. (2002); Peris et al. (submitted); Mars Garcia et al. (2010)
Family environment may be an important intervention target
Family Factors in Child OCD

- Family Distress/Dysfunction (66 – 90%)
- Elevated rates of parental OCD (20 – 50%)
- Elevated rates of Parental Blame
- Elevated rates of Expressed Emotion
- Family Accommodation (62 – 100%)
- Actual participation in OCD rituals (50 – 75%)

Allsopp & Verduyn, 1990; Apter et al., 1984; Bolton et al., 1983; Cooper et al. 1996; Peris et al., 2008; Piacentini et al. 2003; Storch et al., 2007; Van Noppen et al., 1991
Family accommodation is thought to be a barrier to treatment inasmuch as it reinforces avoidance behaviors and undermines exposure-based exercises.
Family Accommodation

Calvocoressi et al. (1995; 1999)
• High rates of family accommodation
• Associated with increased family distress

Amir et al. (2000)
• Modification of family routine linked with depression
• Refusal to accommodate linked to anxiety
• Accommodation not linked to severity of child’s OCD

Storch et al. (2007)
• Family accommodation may mediate the relationship between
• OCD symptom severity and associated functional impairment
## Family Accommodation

<table>
<thead>
<tr>
<th>Participation in OCD</th>
<th>Less than 1x/month</th>
<th>Weekly</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>reassure patient</td>
<td>14%</td>
<td>30%</td>
<td>56%</td>
</tr>
<tr>
<td>participate in rituals</td>
<td>41</td>
<td>14</td>
<td>45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consequences of not participating</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>pt becomes distressed/anxious</td>
<td>19</td>
<td>47</td>
<td>34</td>
</tr>
<tr>
<td>pt becomes angry/abusive</td>
<td>48</td>
<td>29</td>
<td>22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Modification of family routine</th>
<th>None</th>
<th>Mild</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>modified family routine</td>
<td>33</td>
<td>55</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Distress</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>when OCD not accommodated</td>
<td>27</td>
<td>60</td>
<td>13</td>
</tr>
</tbody>
</table>

Peris et al., 2008
Family Context of Childhood OCD

- FAMILY ACCOMMODATION very common
- 60-90% report participating in child’s OCD via reassurance or worse
- 50-80% report child reacts negatively when accommodation is resisted
  - positively correlated with OCD severity and presence of comorbid externalizing symptoms
- 75% of parents report distress when giving in to their child’s OCD
  - given parental resistance is key part of CBT, this needs to be addressed in treatment

Peris et al., 2008
### Parental OCD and Family Context

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent YBOCS &gt; 15</td>
<td></td>
</tr>
<tr>
<td>FES Organization</td>
<td>3.2</td>
</tr>
<tr>
<td>FA Distress</td>
<td>2.1</td>
</tr>
<tr>
<td>FA Consequences</td>
<td>5.8</td>
</tr>
</tbody>
</table>

Parental OCD

- Associated with less family organization
- More negative consequences of OCD limit setting
- Greater distress when limit setting

* * p < .05, ** p < .01, *** p < .001

Peris et al., 2008
Family Accommodation

• Higher child CYBOCS scores associated with greater family participation in child rituals, greater modification of family routine, and more negative child response to OCD-related limit setting

• Higher family conflict associated with more negative child response to limit setting and greater parental distress when accommodating child symptoms

• Higher family cohesion associated with opposite pattern
Family Context of Childhood OCD

Asking families of OCD children – especially distressed families - to resist accommodating child symptoms likely to lead to:

- Emotional distress on part of family
- Negative reaction on part of child
FCBT: Individual child+family interventions which specify structured weekly intervention sessions focused on changing family dynamics

ICBT: Primarily individual child treatments which include family members in a less-structured or less-frequent manner, often as a brief check-in at the end of individual sessions

Barrett, Farrell, Pina, Peris, & Piacentini, 2008
Family Intervention

Goals of Family Intervention

• Reduce level of conflict and feelings of anger, blame, guilt
• Enhance family problem solving
• Facilitate disengagement from child’s OCD symptoms
• Rebuild normal (OCD-free) family interaction patterns
• Foster environment conducive to maintaining treatment gains
Evidence-base
For Treatment
Of Childhood OCD
Controlled Medication Trials

- **Clomipramine** - DeVeauagh-Geiss et al., 1992
- **Fluoxetine** - Riddle et al., 1992; Geller, 2001; Liebowitz, 2003
- **Fluvoxamine** - Riddle et al., 2001
- **Sertraline** - March et al., 1998
- **Paroxetine** – Geller et al., 2004
Meta-Analysis of SRIs for OCD
Geller et al. (2003)

Methods
- All published placebo-controlled medication trials
- Twelve studies with 1,044 total participants
- Four outcome measures: CYBOCS, LOI, NIMH, CGI
- CMI, PAR, FLUV, FLX, SER

Findings
- Mean ES = 0.46 (95% CI = 0.37 - 0.55) (p<.001)
- Overall ES is modest
- CMI > PAR=FLUV=FLX=SER
- No relationship between ES and publication date
Psychosocial Treatment
Of Childhood OCD
<table>
<thead>
<tr>
<th># of Studies</th>
<th>Design</th>
<th>Description</th>
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<tr>
<td>2</td>
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<td>Rigorously designed RCTs</td>
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<td>4</td>
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<td>One or more design limitations</td>
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<tr>
<td>10</td>
<td>Type 3</td>
<td>Open trials</td>
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</table>

Barrett, Farrell, Pina, Peris, & Piacentini, 2008
JCCAP Special issue on EBTs for Childhood Disorders
## Controlled Efficacy Trials for Child OCD

<table>
<thead>
<tr>
<th>Study Description</th>
<th>N</th>
<th>Outcome</th>
</tr>
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<tbody>
<tr>
<td>De Haan (1998)</td>
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</tr>
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<td>Ind-CBT = Group-CBT &gt; WL</td>
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<td>POTS I (POTS Team, 2004)</td>
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Barrett, Farrell, Pina, Peris, & Piacentini, 2008
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### Controlled Efficacy Trials for Child OCD

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<td>112</td>
<td>COMBO &gt;? CBT &gt;= SER &gt; PBO</td>
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<tr>
<td>POTS II (March et al, under review)</td>
<td>124</td>
<td>MM+Full CBT &gt; MM+CBT-lite &gt; MM</td>
</tr>
<tr>
<td>UCLA (Piacentini et al, under review)</td>
<td>71</td>
<td>CBT &gt; PsychoEd/Relax Training</td>
</tr>
</tbody>
</table>

Comparison across trials complicated by methodological differences
Comparison of CBT and CMI
DeHaan et al. (1998)

Effect Size
CBT = 1.56
CMI = .86
Comparison of Individual & Group CBT

Barrett et al. (2004)

I-CBT = G-CBT > WL

Effect Size
I-CBT = 2.84
G-CBT = 2.63
Pediatric OCD Treatment Study (POTS)
Duke (J. March), Penn (E. Foa, M. Franklin), Brown (H. Leonard)

128 OCD youngsters randomized to:
- CBT
- SER
- COMBO
- Pill PBO

SAMPLE CHARACTERISTICS
Gender (female): 50%
Mean age: 11.7 (2.7)
Age range: 7-17
Ethnicity (Caucasian): 93%
Any Comorbid Disorder 80%
  • Internalizing Disorder 63%
  • Externalizing Disorder 27%
    - ADD/ADHD and on Psychostimulant 10%

POTS (2004)
Change in CYBOCS Total Score

**POTS STUDY**

**COMB > CBT = SER > PBO**

**Effect Size**
- CBT = .98
- Comb = 1.46
Lower Med Doses in Combo Group

POTS STUDY

Sertraline (mg)

- PBO
- SER
- COMB

Median
Mean

0 50 100 150 200 250

---

Median
Mean

---

POTS STUDY

Sertraline (mg)
Treatment x Site Interaction
DUKE-PENN (POTS) STUDY

Effect Size (Btw Ss)

<table>
<thead>
<tr>
<th></th>
<th>Penn</th>
<th>Duke</th>
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<tbody>
<tr>
<td>SER</td>
<td>0.6</td>
<td>0.8</td>
</tr>
<tr>
<td>CBT</td>
<td>1.8</td>
<td>0.4</td>
</tr>
<tr>
<td>COMB</td>
<td>1.4</td>
<td>1.2</td>
</tr>
</tbody>
</table>
UCLA CBT for Child OCD Study

Randomized Controlled Trial comparing:

- **F/CBT** – CBT (ERP+Cog Restructuring) plus a structured family component
- **P/RT** – Psychoeducation plus Relaxation Training

F/CBT included weekly manualized family CBT component

Twelve sessions therapy delivered over 14 weeks

Piacentini et al. (under review)
Supported by NIMH R01 MH58549
Treatment Response Rate

UCLA STUDY

Week

ERP

RT

% Responded

4 8 14

Intent to Treat

p < .05
Excellent Responder
POTS and UCLA Studies

Percent Response

(CY-BOCS ≤ 10)

<table>
<thead>
<tr>
<th>Group</th>
<th>Percent Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBO</td>
<td>3</td>
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<tr>
<td>LA - RT</td>
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<tr>
<td>SER</td>
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<tr>
<td>CBT</td>
<td>39</td>
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<tr>
<td>LA - CBT</td>
<td>40</td>
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<tr>
<td>COMB</td>
<td>54</td>
</tr>
</tbody>
</table>
**Storch et al. (2007):** Families receiving intensive FCBT showed greater reduction in family accommodation compared to those receiving weekly treatment.

**Merlo et al. (2009):** In a partially-overlapping sample of children receiving FCBT through one of two separate open-label studies, decreases in family accommodation over the course of treatment predicted reduced symptom severity and OCD-related impairment post-treatment.

**Piacentini et al. (under review):** FCBT was associated with a marginally greater reduction in parent-reported accommodation of OCD symptoms ($p=.05$). Reduction in family accommodation temporally preceded improvement in OCD severity across treatment groups and child functional status for FCBT only.
Effectiveness of CBT for Child OCD
Valderhaug, Larsson, Gotestam, & Piacentini, 2006

28 Norwegian youth treated in community clinics by community practitioners.

60.6% response rate post-tx

68.8% response rate at 6 mo FU
Intensive CBT for Child OCD

**Franklin al. (1998)**

14 Ss age 10-17 nonrandom assignment to outpatient (16wks) or intensive (18 days) CBT. Groups didn’t differ post-tx

**Storch et al. (2006)**

40 Ss age 7-17 randomized to 14 sessions outpatient (14 wks) or intensive (3wks) CBT c/ family component. Intensive > outpatient post-tx but not at 3 mo FU

Excellent response rates to intensive CBT, but differences in baseline severity differences (sicker kids in intensive tx) complicate comparison with outpatient samples.
Limited available data suggests treatment outcome not related to gender or ethnicity, but this has not been systematically evaluated in controlled trials.
## Classification of Psychosocial Treatments for OCD in Children and Adolescents

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Well-Established Treatments</strong></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>—</td>
</tr>
<tr>
<td><strong>Probably Efficacious Treatments</strong></td>
<td></td>
</tr>
<tr>
<td>Individual CBT</td>
<td>POTS (2004)</td>
</tr>
<tr>
<td>Individual CBT + sertraline</td>
<td>POTS (2004)</td>
</tr>
<tr>
<td><strong>Possibly Efficacious Treatments</strong></td>
<td></td>
</tr>
<tr>
<td>Family-Focused Individual CBT</td>
<td>Barrett et al. (2004)</td>
</tr>
<tr>
<td>Family-Focused Group CBT</td>
<td>Barrett et al. (2004)</td>
</tr>
<tr>
<td><strong>Experimental Treatments</strong></td>
<td></td>
</tr>
<tr>
<td>Group CBT</td>
<td>Multiple authors</td>
</tr>
</tbody>
</table>

*Barrett et al., JCCAP, 2008*
For more information, please go to the main website and browse for workshops on this topic or check out our additional resources.

**Additional Resources**

**Online resources:**

**Books:**

**Peer-reviewed Journal Articles:**
Full Reference List

Keynote: Evidence-based Treatment of Obsessive Compulsive Disorder in Children and Adolescents

Websites:

Books:


Peer-reviewed Journal Articles:


