State of the art treatment for obsessive compulsive disorder (OCD)

Chris Molnar, Ph.D.

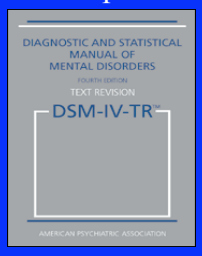
Mind Your Health Seminar

September, 2005

Questions to be answered

- **What is OCD?**
- How is OCD treated?
- What interferes with a good response?
- What if recommended treatments don't work?
- What resources are available for people with OCD and those who care about them?

How we diagnose obsessive compulsive disorder (OCD)



- Obsessions
- Compulsions
- One of the 4 "D"s

1. Distress (extreme and hard to manage)
2. Dysfunction in "work, play, and love"
3. Deviance (statistical and social)
4. Danger to self or others

DSM-IV-TR available free at www.behavenet.com

COMMON OBSESSIONS

- Germs, contamination, disease
- Harm to self/others
- Scrupulosity
- Forbidden thoughts
- "Just right" urges
- Urges to tell, ask, confess
- Saving/hoarding
- Magical thinking

COMMON COMPULSIONS

- Washing/cleansing
- Repeating/redoing
- Reassurance seeking
- Confessing/apologizing
- Ordering/arranging
- Checking
- Touching
- Tapping
- Counting
- Hoarding

The 6 DSM-IV anxiety disorders

- **1. Phobias**
  - **a. Specific**
  - **b. Social**
  - **c. Agoraphobia**
- **2. Panic disorder**
- **3. Posttraumatic stress disorder (PTSD)**
- **4. Acute Stress Disorder**
- **5. Generalized Anxiety Disorder (GAD)**
- **6. Obsessive Compulsive Disorder (OCD)**

DSM-IV: Diagnostic and statistical manual of mental disorders

Components of anxiety & fear common to the anxiety disorders

The three "B" s one must be with when fearful

Beliefs (in threat)

Body (arousal)

Behavior (avoidance)

Focused **B**reathing always helps!

Body's response to threat (e.g. contamination in OCD) can include a panic attack … this is not panic disorder

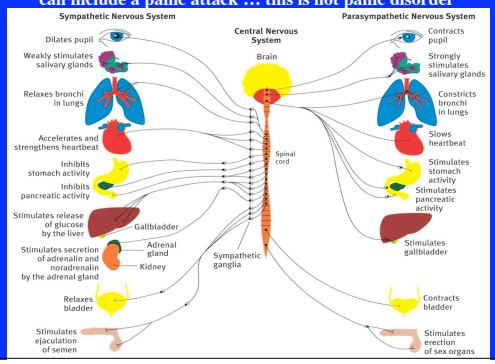


Table 5-8 DSM-IV Checklist

OBSESSIVE-COMPULSIVE DISORDER

1. Recurrent obsessions or compulsions.
2. Past or present recognition that the obsessions or compulsions are excessive or unreasonable.
3. Significant distress or impairment, or disruption by symptoms for more than one hour a day.

Based on APA, 2000, 1994.

Table 5-2

Anxiety Disorders Profile

	ONE-YEAR PREVALENCE (%)	FEMALE:MALE RATIO	TYPICAL AGE AT ONSET	PREVALENCE AMONG CLOSE RELATIVES	PERCENTAGE RECEIVING TREATMENT
Generalized anxiety disorder	4.0%	2:1	0–20 years	Elevated	27%
Specific phobias	9.0	2:1	Variable	Elevated	12%
Social phobias	8.0	3:2	10–20 years	Elevated	21%
Panic disorder	2.3	5:2	15–35 years	Elevated	54.4%
Obsessive-compulsive disorder	2.0	1:1	4–25 years	Elevated	41.3%

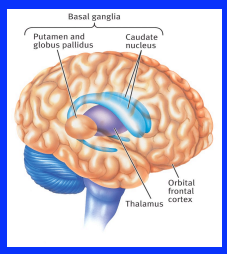
Source: Ingersoll & Burns, 2001; APA, 2000, 1994; Kessler et al., 1999, 1994; Regier et al., 1993; Blazer et al., 1991; Davidson et al., 1991; Eaton et al., 1991.

Differential Diagnosis

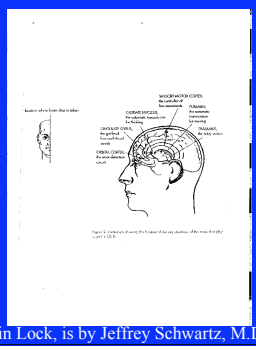
- Other anxiety disorders often co-occur
  Different from and similar to worry
- 80% with OCD will develop Major Depressive Disorder
- Impulse control disorders bring pleasure not distress
- Tic Disorder
- ADHD
- Psychotic disorders like schizophrenia
- OCD verses OC Personality Disorder

OCD is a neurobiological disorder

- Hyperactive orbital frontal cortex (OFC) and basal ganglia regions (e.g., caudate nucleus) leads to thalamic dysfunction, thus causing OCD symptoms
- Marked by serotonin dysfunction



"BRAIN LOCK"



Brain Lock, is by Jeffrey Schwartz, M.D.

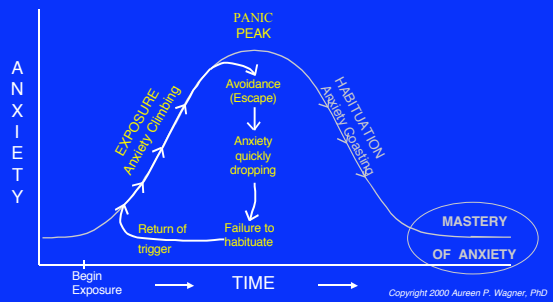
The idea that activity of the OFC is driven by and locked to activity of the basal ganglia.

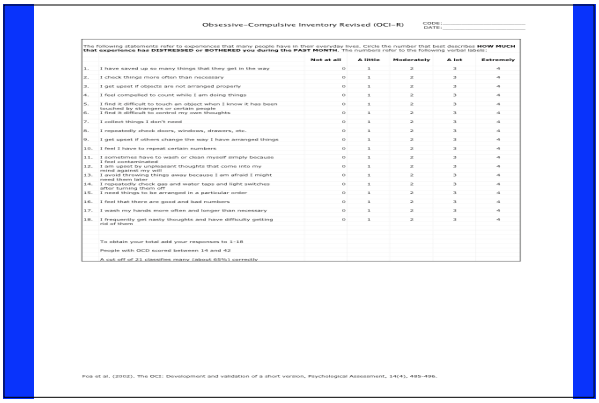
When basal ganglia do not serve their filtering function then the error-detection activities of the OFC are over-active

The cingulate gyrus amplifies the feeling that something is wrong

Frontal cortex needs to inhibit basal ganglia more, usually through ERP or medications that improve function

THE VICIOUS CYCLE OF AVOIDANCE MAINTAINS OCD SYMPTOMS





Obsessive-Compulsive Inventory Revised (OCI-R)

Foa et al. (2002). The OCI: Development and validation of a short version. Psychological Assessment, 14(4), 485-496.

Questions to be answered

- What is OCD?
- **How is OCD treated?**
- What interferes with a good response?
- What if recommended treatments don't work?
- What resources are available for people with OCD and those who care about them?

FDA-Approved Pharmacotherapy for OCD Treatment - (S)SRIs

- **Clomipramine** **25 - 250 mg / day**
- **Fluoxetine** **5 - 80 mg / day**
- **Fluvoxamine** **25 - 300 mg / day**
- Paroxetine 10 - 60 mg / day
- **Sertraline** **50 - 200 mg / day**
- Citalopram 20 - 80 mg / day

Drugs in white are FDA-approved for kids

Now the selective serotonin reuptake inhibitors (SSRIs), with fewer side-effects, are tried before the SRI CMI*

Table 9-2

Drugs That Reduce Unipolar Depression

CLASS/GENERIC NAME	TRADE NAME
Second-Generation Antidepressants	
Maprotiline	Ludiomil
Amoxapine	Asendin
Trazodone	Desyrel
Clomipramine	Anafranil
Fluoxetine	Prozac
Sertraline	Zoloft
Paroxetine	Paxil
Venlafaxine	Effexor
Fluvoxamine	Luvox
Nefazodone	Serzone
Bupropion	Wellbutrin
Mirtazapine	Remeron
Citalopram	Celexa

(Gitlin, 2002)

Visit www.ocfoundation.org for FDA-approved SSRIs

Pharmacotherapy for OCD

- **Can take up to 3 months at an optimal dose to get a response. This is longer than it takes for SRIs to target most cases of depression**
- **80-90% of people treated with medications alone will relapse oncemedications are discontinued**
- **Side effects can include, but are not limited to:**
  - **weight gain**
  - **sedation**
  - **sexual dysfunction**
  - **hyperactivity in some children**

Cognitive-Behavioral Treatment (CBT) for OCD usually called Exposure and Ritual Prevention (ERP)

Goals of CBT / ERP for OCD:

- Break the cycle of avoidance
- Face the fear
- Experience dissipation of anxiety without ritualizing
- Learn that feared consequences do not occur

EXPERT CONSENSUS GUIDELINES FOR TREATMENT OF OCD

o Children	CBT is first line treatment
o Adolescents	If mild OCD then CBT first
	If severe then CBT + SRI
o Adults	If mild then CBT first
	If severe then SRI (first) + CBT

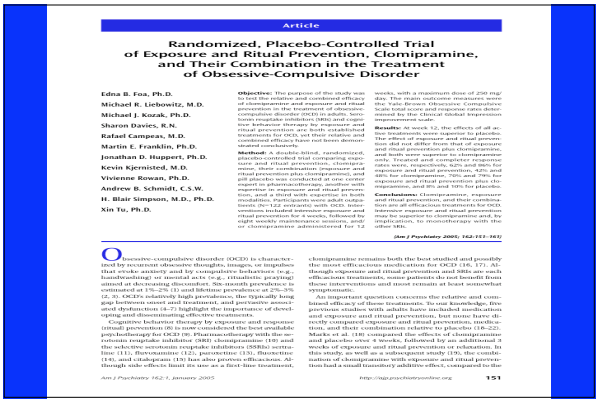
Notes: CBT = Cognitive-behavioral therapy
SRI = Serotonin Reuptake Inhibitor (SRI)
*source: www.psychguides.com

Theoretical Framework for Treatment

- Learning theory and behavioral therapy
- Cognitive theory and therapy
- Emotional processing theory (Foa & Kozak, 1986):
  - Fear activation is required
  - Exposure to corrective information is essential to bring about cognitive change
  - Habituation is an outcome, not a mechanism

Implications of Emotional Processing Theory for Treatment of OCD

- Exposure is designed to activate fear network
- Need to "match" exposures to the fear network
- Response prevention is necessary because rituals prevent the natural process of habituation and hence interfere with cognitive change
- Old learning is never erased, thus exposure in multiple contexts is needed



Article

Randomized, Placebo-Controlled Trial of Exposure and Ritual Prevention, Clomipramine, and Their Combination in the Treatment of Obsessive-Compulsive Disorder

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Objective: The purpose of the study was to test the relative and combined efficacy of clomipramine and exposure and ritual prevention in the treatment of obsessive-compulsive disorder (OCD). Both serotonin reuptake inhibition (SRI) and cognitive behavior therapy by exposure and ritual prevention are both established treatments for OCD, yet their relative and combined efficacy has not been demonstrated conclusively.

Method: A double-blind, randomized, placebo-controlled trial comparing exposure and ritual prevention, clomipramine, the combination of exposure and ritual prevention plus clomipramine, and pill placebo was conducted at one center with 123 adult outpatients with OCD. Intensive exposure and ritual prevention was provided for 4 weeks, followed by eight weekly maintenance sessions, and/or clomipramine administered for 12 weeks, with a maximum dose of 250 mg/day. The main outcome measures were the Yale-Brown Obsessive Compulsive Scale total score and response rates determined by the Clinical Global Impression improvement scale.

Results: At week 12, the effects of all active treatments were superior to placebo. The effect of exposure and ritual prevention did not differ from that of exposure and ritual prevention plus clomipramine, which did not differ from that of clomipramine only. Treated and completer response rates were, respectively, 62% and 86% for exposure and ritual prevention, 42% and 48% for clomipramine, 76% and 79% for exposure and ritual prevention plus clomipramine, and 9% and 10% for placebo.

Conclusions: Clomipramine, exposure and ritual prevention, and their combination are all efficacious treatments for OCD. Exposure and ritual prevention alone may be superior to clomipramine and, by implication, to monotherapy with the other MIs.

[Am J Psychiatry 2005; 162:151–161]

Obsessive-compulsive disorder (OCD) is characterized by recurrent obsessive thoughts, images, or impulses that evoke anxiety and by compulsive behaviors (e.g., handwashing) or mental acts (e.g., ritualistic praying) aimed at decreasing discomfort. Six-month prevalence is estimated at 1%–2% (1) and lifetime prevalence at 2%–3% (2, 3). The disorder is usually chronic, typically being punctuated by periods of remission and exacerbation, and psychosocial dysfunction (4–7) highlights the importance of developing and disseminating effective treatments.

Cognitive behavior therapy by exposure and response (ritual) prevention (8) is now considered the best available psychotherapy for OCD (9). Pharmacotherapy with the serotonin reuptake inhibitor (SRI) clomipramine (10) and the selective serotonin reuptake inhibitors (SSRIs) sertraline (11), fluvoxamine (12), paroxetine (13), fluoxetine (14), and citalopram (15) has also proven efficacious. Although side effects limit its use as a first-line treatment, clomipramine remains both the best studied and possibly the most efficacious medication for OCD (16, 17). Although exposure and ritual prevention and SRIs are each efficacious treatments, some patients do not benefit from these interventions and most remain at least somewhat symptomatic.

An important question concerns the relative and combined efficacy of these treatments. To our knowledge, five studies (18–22) have directly compared clomipramine and exposure and ritual prevention, but none have directly compared exposure and ritual prevention, medication, and their combination relative to placebo (16–22). Marks et al. (18) compared the effects of clomipramine and placebo over 4 weeks, followed by an additional 3 weeks of exposure and ritual prevention or relaxation. In this study, as well as a subsequent study (19), the combination of clomipramine with exposure and ritual prevention had a small transitory additive effect, compared to the

Pharmacotherapy condition of Foa et al., 2005 treatment outcome study

- Twelve weekly visits to the psychiatrist
- Medication gradually increased over 5 weeks
- Range of 150-250 mg/day
- Drug (CMI or PBO) continued for 12 weeks
- Double-blind adminstration of PBO and CMI

Intensive EX/RP Therapy
The treatment study of Foa et al., 2005 that influenced the expert consensus guidelines

- Two treatment planning sessions
- 15 2-h sessions over 3 wk, each including
- More of the same exposure for homework (about 90 minutes or until habituation occurs)
- A home visit, about 8 hrs. over 2 days
- 8 weekly maintenance sessions following intensive treatment

Planning Sessions (2)

- Detailed investigation of OCD symptoms
  - Antecedents, exact behavior (neutralizing behavior, rituals, avoidance), consequences
- Development of exposure hierarchy
  - Use of Subjective Units of Distress / Discomfort (SUDS)
- Ritual prevention instructions and training in self-monitoring
- Coping with OCD-related distress

EX/RP Session Structure

Review homework sheets	~ 15 min.
Imaginal exposure	~ 45 min.
Exposure and ritual prevention	~ 45 min.
Discuss and agree on homework	~ 15 min.

Homework Includes:

- Self exposure to feared
- Instructions to refrain from mental or behavioral rituals
- Daily monitoring of rituals

Cognitive Behavioral Treatment for OCD (EX/RP) includes:

Exposure *in vivo*:	Prolonged confrontation with anxiety evoking stimuli (e.g.,contact with contamination)
Imaginal Exposure:	Prolonged imaginal confrontation with feared disasters (e.g., hitting a pedestrian while driving)
Ritual Prevention:	The blocking of compulsions (e.g., leaving the kitchen without checking the stove)
Cognitive Interventions:	Correcting erroneous cognitions (e.g., anxiety decreases without ritualizing)

Moving Up the Hierarchy

- Build on past successes from earlier sessions
- Encourage patient to choose from among equivalent stimuli for exposures
- Note changes in impairment & decreased symptoms to highlight improvement

Exposure sound simple to you?

Try it!:

- I hope that _____ gets hit by a Mac truck and his / her body is dragged along the highway until it is unrecognizable
- Hold the toilet seat in the restaurant firmly and don't wash for a day afterwards

FEAR OF CONTAMINATION/CLEANSING

1.	Get medical book and read about hepatitis	2
2.	Describe symptoms and causes of hepatitis to parents	3
3.	Say the word hepatitis 10 times in a 2 minute conversation	5
4.	Touch parents with unwashed hands	6
5.	Touch myself all over my body with unwashed hands	7
6.	Hug parents with unwashed hands	8
7.	Use the toilet and hug parents immediately afterwards	9
8.	Use only 4 squares of toilet paper after using toilet	9
9.	Hug sibling	10
10.	Sit on all chairs in room after using toilet	10
11.	Ask parents to sit in "contaminated" chairs	10

MORAL DILEMMAS/CHECKING

1.	Leave faucet running while brushing teeth	3
2.	Use one pail of water to brush teeth	5
3.	Leave all the lights in the house on for 10 minutes	5
4.	Leave two mouthfuls of food uneaten on plate	6
5.	Leave half of dinner uneaten on plate	8
6.	Put glass bottle in garbage instead of recycle	8
7.	Put uneaten food in garbage	9
8.	Leave TV and radio on for one hour with no one listening	9
9.	Leave faucet dripping for one hour	10
10.	Leave bathroom faucet dripping all night	10

Imaginal Exposure

Summary of Foa et al., 2005 Treatment Protocol

- Core EX/RP = 17 sessions over 8 weeks
- Assessment & Psychoeducation
- Planning Sessions
- Exposure and Ritual Prevention (EX/RP)
- Relapse Prevention
- Involvement of Support Person

Confronting the Greatest Fear: scheduled for session 6

- Encouragement and praise for efforts
- Modeling
- Discussion of acceptable *vs.* unacceptable risks
- Repeated and prolonged exposure
- Confront fears in multiple contexts

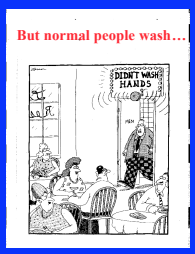
Home Visits (2)

- Goal: Promote generalization of treatment gains
- Can be used earlier in treatment if needed
- Washers: Contaminate natural environment
- Checkers: Use real-life threats (e.g., stove)
- Hoarders: Assist with discard decision-making
- Some patients require more than two

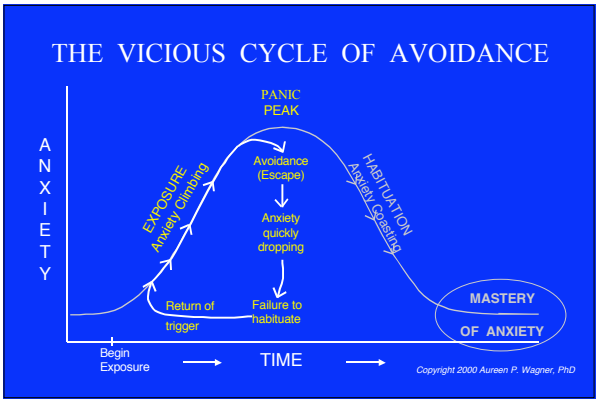
EXPERIENTIAL LEARNING

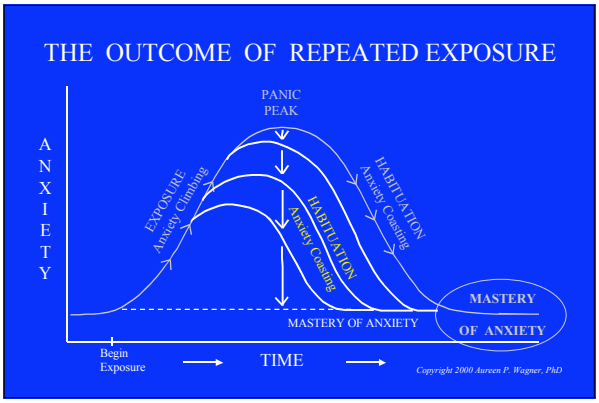
- Anxiety dissipates without doing rituals
- Feared consequences do not occur

Keep Doing Those Exposures…



- Continue to expose yourself, for the rest of your life, to those things that you used to avoid and that used to distress you
- Expect waxing of symptoms during stressful times

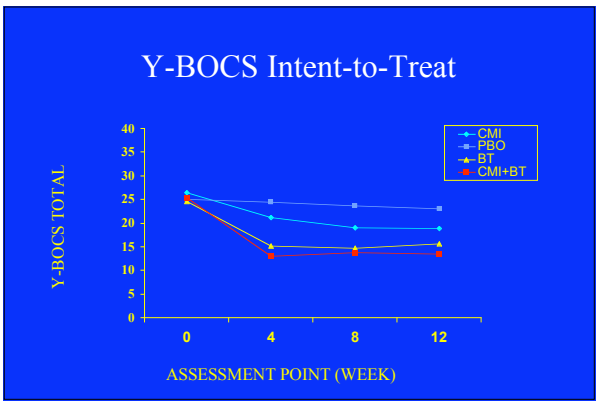


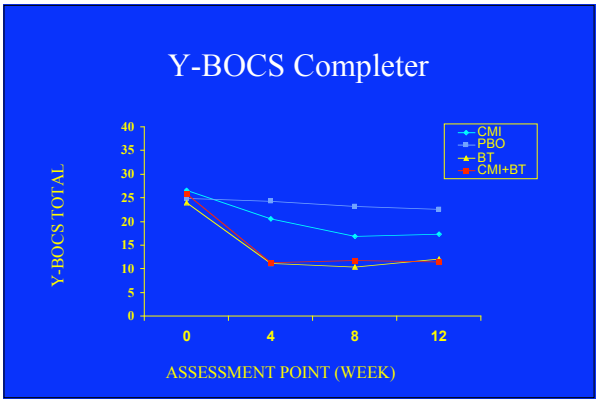


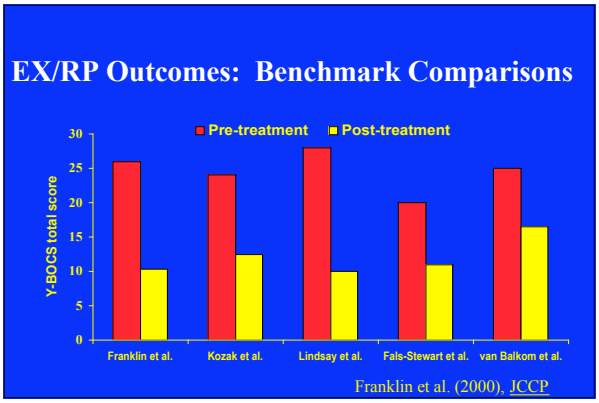
Primary Outcome measure used by Foa et al., 2005 study is the Yale-Brown Obsessive Compulsive Scale (Y-BOCS)

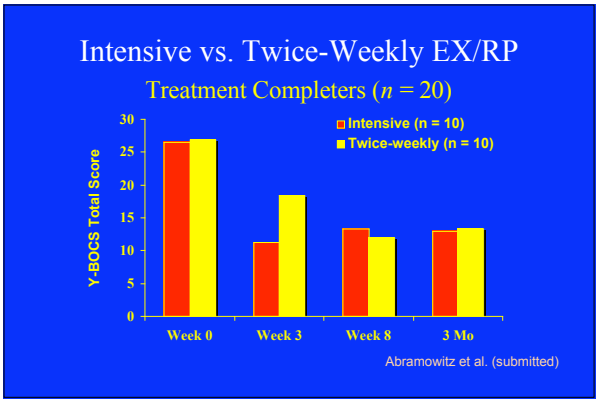
- **time occupied**
- **interference with functioning**
- **subjective distress**
- **resistance**
- **control**

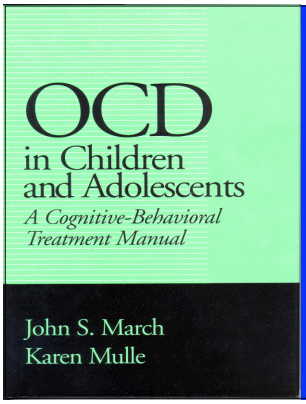
Higher scores mean more OCD. Scores range from 0 - 40 with greater than 15 usually being an inclusion cut off









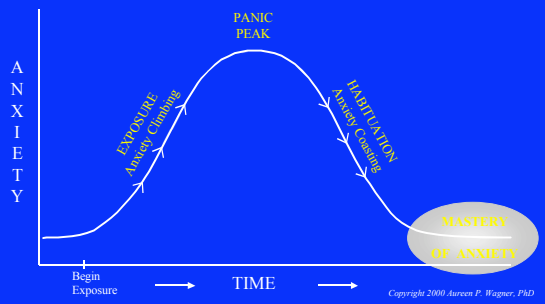


Exposure and response (ritual) prevention can be modified for children

March & Mulle's (1998) CBT Protocol: Core Elements

- Psychoeducation & Cognitive Training
- Mapping OCD: Development of Treatment Hierarchies
- Exposure and Ritual Prevention (EX/RP)
- Relapse Prevention
- Parent Sessions

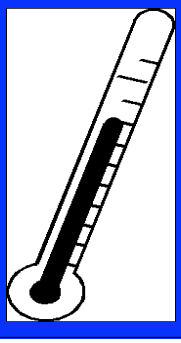
UP AND DOWN THE WORRY HILL



LESSONS TO BE LEARNED ARE THE SAME

- Anxiety is transient
- Anxiety is survivable
- Avoidance strengthens fear; exposure weakens it
- Habituation is natural and automatic
- Exposure is necessary for habituation
- Anxiety in *anticipation* of exposure may be higher than anxiety during *actual* exposure
- Feared consequences do not materialize

The Fearmometer

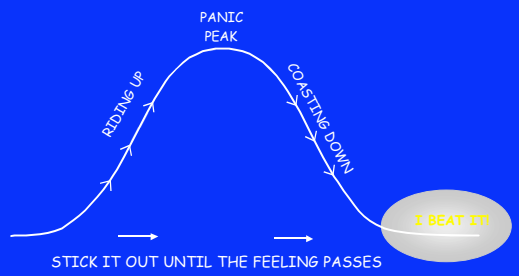


10 Out of control! Ballistic!
9 Can't handle it.
8 Really tough.
7 Pretty tough.
6 Getting tough.
5 Not too good.
4 Starting to bother.
3 Just a little uneasy.
2 A little twinge.
1 Piece of cake!

GRADUAL EXPOSURE

1. Select lowest target on *Fear Ladder (SUDS for Adults)*
2. Begin exposure
3. Prevent escape, avoidance, rituals
4. Wait for habituation to occur
5. Select next target, repeat steps 1 to 4

RIDE: UP AND DOWN THE WORRY HILL



RIDE Up and Down the Worry Hill

- **Rename** the thought.
- **Insist** that YOU are in charge!
- **Defy** OCD, do the OPPOSITE.
- **Enjoy** your success, reward yourself.

VIOLENT THOUGHTS/MENTAL RITUALS

1.	Inquire about cousin's pregnancy	3
2.	Go to friend's house and play with her baby in her presence	4
3.	Watch elderly man cross street	5
4.	Go to pregnant cousin's house and stay for at least one hour	6
5.	Offer to babysit for friend's baby	6
6.	Schedule a day to babysit for friend's baby	7
7.	Put baby's bottle in microwave without checking on baby	8
8.	Write down violent thoughts about cousin's baby dying	8
9.	Write down thoughts about elderly man getting run over	9
10.	Listen to therapist read the violent thoughts out loud	10
11.	Say violent thoughts out loud	10
12.	Go to mall, say violent thoughts as pregnant women go by	10

A Simplified Theoretical Approach

"Blah, blah, blah, do the thing you're afraid of,
Blah, blah, blah, the more you do it, the easier it gets."

Gwen Franklin, age 6, to her father, 2001

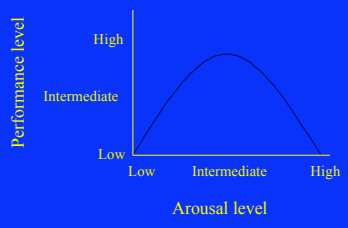
Questions to be answered

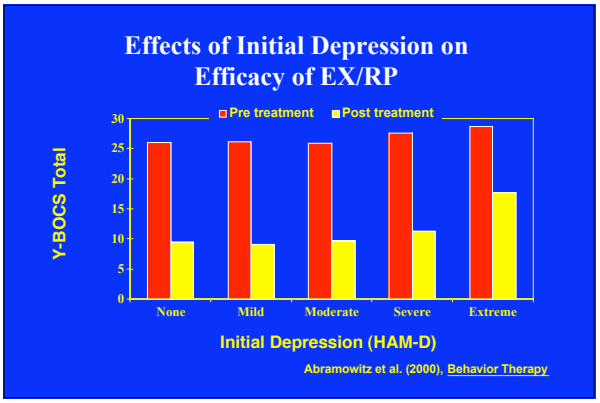
- What is OCD?
- How is OCD treated?
- **What interferes with a good response?**
- What if recommended treatments don't work?
- What resources are available for people with OCD and those who care about them?

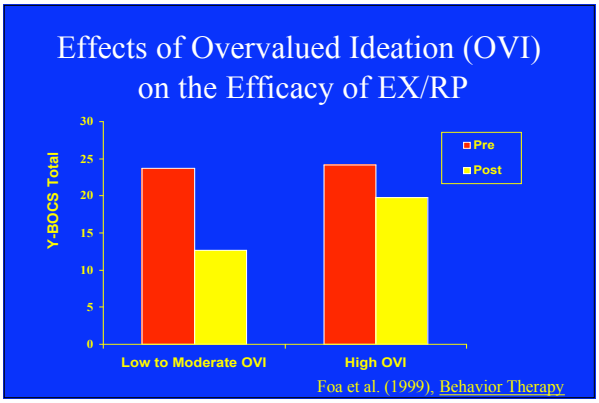
Factors Impeding the Efficacy of EX/RP

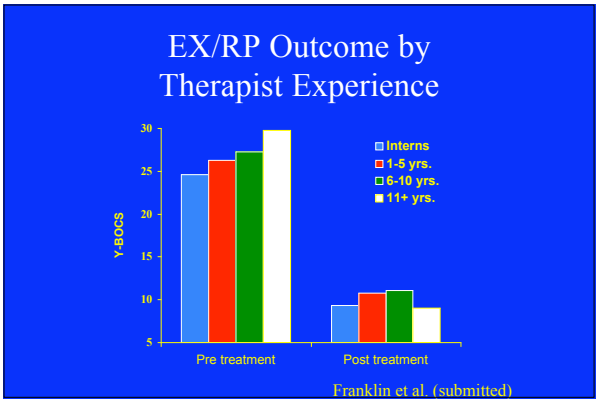
- Severe Depression or Fear / Anxiety
- Overvalued Ideation (Poor Insight)
- Non-Compliance with EX or RP
- Severe personality disorders (e.g. Schizotypal)

The Yerkes-Dodson Law









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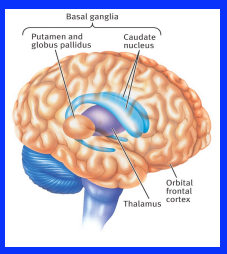
- **What if recommended treatments don't work?**
- What resources are available for people with OCD and those who care about them?

What if first and second line recommended treatments don't work? See expert consensus guidelines again…

- More aggressive and/ or adjunctive pharmacotherapy
- Add ECT if also depressed
- Neurosurgery
- Deep Brain Stimulation
- Add transcranial magnetic stimulation (TMS)?
- Add vagus nerve stimulation (VNS)?

Neurosurgery involves lesions to the frontal-striatal-pallidal-thalamic-frontal loop / circuit

- **Capsulotomy:** lesion the anterior limb of the internal capsule
- **Cingulotomy:** Lesion the cingulum bundle
- Lesions to midline **thalamic nuclei**



Resources

- Internet

www.molnarpsychology.com/resources
for a list of self-help, educational, and treatment manual resources

www.behavenet.com/capsules/disorders/anxietydis.htm
for detailed information about diagnoses

www.ocfoundation.org
for the most up to date OCD treatment resources

www.aabt.org
to find a cognitive-behavioral psychotherapist in your area

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