Interoceptive Exposure:
An Underused Weapon in the Arsenal against Obsessions and Compulsions

Jonathan S. Abramowitz, PhD
University of North Carolina at Chapel Hill
5 April 2018
Master Clinician Workshop
Anxiety and Depression Association of America Conference

Obsessive-Compulsive Disorder (OCD)
- Obsessions
- Compulsions, avoidance, rituals
- Common themes:
  - Doubt/responsibility for harm
  - Symmetry/order
  - Unacceptable/taboo thoughts
  - Contamination

Conceptual Model of OCD

- Obsessive beliefs
- Hypervigilance
- Fear Cues
  - External mental
- Fight or Flight Response
- Compulsions, avoidance, and other rituals
Exposure Therapy for OCD

- Repeated, prolonged confrontation with feared stimuli without performing rituals
- General aims
  - Learn that feared stimuli are safe
  - Develop distress tolerance
- Most effective treatment for OCD

What is Anxiety?

- The body’s alarm reaction to perceived threat
  - “Fight-or-flight” response
  - Sensations are side effects
- Normal and highly adaptive
  - Helps us survive and do our best
- Explanations for specific fight-flight sensations

Anxiety Sensitivity (AS)

- Tendency to fear ambiguous or anxiety-related body sensations
  - “Fear of fear”
- Based on the belief that anxiety and/or physiological arousal is dangerous
Body vigilance
- Attentional bias toward somatic sensations
- Increased detection of sensations misperceived as dangerous
- Similar to other OCD checking behaviors

AS and OCD
- Under-studied area
- OCD patients > non-patients
  - Panic disorder and social anxiety patients > OCD
- AS and OCD symptom severity positively correlated in clinical and nonclinical samples

Somatic Concerns in OCD
- Arousal-related body sensations misinterpreted as
  - Intolerable
  - Sign of being “untreatable” or a “failure”
  - “Proof” of obsessional fears (anxious arousal or sexual arousal?)
A More Comprehensive Conceptual Model of Some Presentations of OCD

- Obsessive beliefs, Anxiety sensitivity
- Hypervigilance, Body vigilance
- Fear Cues (External, mental, or somatic)
- Fight or Flight Response
- Compulsions, avoidance, and other rituals

AS and OCD Treatment

- Also under-studied
- Residential OCD Clinic:
  - Pre-treatment AS predicted poorer OCD treatment outcome
- Unclear how AS influences exposure outcomes
  - Two possibilities...

1. AS Reinforces Obsessive Beliefs

- Hypervigilance → increased threat perception
  - Danger = seemingly everywhere
  - “Proof” that obsessions are true
- AS-related safety behaviors perceived as necessary
  - Misattribution of safety
2. AS Threatens Adherence to Exposure Therapy

- AS amplifies exposure difficulty
  - High-AS OCD patients face two exposure stimuli
    - The obsessional situation AND the arousal-related sensations
  - Reluctance to do exposures or homework

- AS creates prognostic pessimism
  - Patient believes s/he is “too weak”
  - Patient believes exposure is “too hard”

Interoceptive Exposure (IE)

- Repeated, prolonged confrontation with somatic stimuli without performing rituals or other “safety behaviors”

- General aims
  - Test threat overestimates
  - Develop distress tolerance
  - An underused therapeutic tool!

Utility of IE for OCD

- Literature and clinical experience point to the importance of body sensations in OCD
- High AS might contribute to relapse or poor treatment response
- Implications for assessment, treatment planning, and the exposure to-do list
Assessment of AS in OCD Patients

- Assessment method
  - Self-report or clinician-rated
- Assessed content
  - Sensations and their (anticipated) consequences
  - Bodily secretions and their (perceived) meaning
  - Safety behaviors

Self-Report Measures

- Anxiety Sensitivity Index-3 (ASI-3; Taylor et al., 2007)
  - 18 items load onto 3 subscales
    - “It scares me when my heart beats rapidly”
    - “It scares me when I am unable to keep my mind on a task”
    - “When I tremble in the presence of others, I fear what people might think of me”
- Body Vigilance Scale (BVS; Schmidt et al., 1997)
  - 4 items measuring attention bias toward specific sensations
    - Heart palpitations, dizziness, nausea, etc.

Interview Questions: Body Sensations

- What sensations in your body trigger you to become fearful?
- What goes through your mind if you notice these sensations?
- Do you ever feel like certain body sensations are proof that your OCD fears are true (or will come true)?
Interview Questions: Rituals/Avoidance

- What checking rituals do you have that are related to your OCD-related body sensations?
- How frequently do you:
  - visit doctors about the body sensations?
  - research body sensations online?
  - do things (or avoid certain things) to prevent the body sensations from showing up in the first place?

Case Conceptualization: Jen

Obsessive beliefs, Anxiety sensitivity
- Urges lead to actions, inflated responsibility, shakiness forecasts loss of control

Hypervigilance, Body vigilance

Fear Cues
- Knives, body sensations, intrusive thoughts

Fight or Flight Response

Compulsions, avoidance, and other rituals
- Escape, distraction, counting rituals

Psychoeducation

- Nature of anxiety and the “Fight-or-Flight System”
- Normalize body sensations
  - “Noisy bodies”
  - Anxiety/fear is universal and safe
- Normalize unwanted intrusive thoughts
- Explain how rituals/avoidance counterintuitively maintain OCD
  - Draw conceptual model for patient
Rationale for Exposure with IE

- Violate threat-related beliefs and expectations about obsessions and OCD-related body sensations
  - Sensations aren’t necessarily dangerous
  - Anxiety (and sensations of arousal) is tolerable/manageable
  - Anxiety doesn’t last forever or “spiral out of control”

Determine IE Tasks

- Identify exercises that tap into OCD-related fear
- After every exercise, assess:
  - Physical sensations and their intensity
  - Subjective distress (“SUDS”)
- Allow sensations to subside between exercises
  - Not recommended during actual exposure trials later on
- Need: watch/timer, thin cocktail straws, swivel chair
  - Appropriate clothing/shoes

<table>
<thead>
<tr>
<th>Exercise</th>
<th>Sensations/Intensity (0-10)</th>
<th>Duration (s)</th>
<th>Distress (0-10) Duration (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shake head side to side</td>
<td></td>
<td>30 seconds</td>
<td></td>
</tr>
<tr>
<td>Place head between legs</td>
<td></td>
<td>30 seconds</td>
<td></td>
</tr>
<tr>
<td>Rest in place</td>
<td></td>
<td>300 seconds</td>
<td></td>
</tr>
<tr>
<td>Hold breath</td>
<td></td>
<td>600 seconds</td>
<td></td>
</tr>
<tr>
<td>Fear</td>
<td></td>
<td>20 seconds</td>
<td></td>
</tr>
<tr>
<td>Spin</td>
<td></td>
<td>30 seconds</td>
<td></td>
</tr>
<tr>
<td>Breathe through straw</td>
<td></td>
<td>30 seconds</td>
<td></td>
</tr>
<tr>
<td>Hyperventilate</td>
<td></td>
<td>600 seconds</td>
<td></td>
</tr>
</tbody>
</table>
IE To-Do List

- Only include IE exercises that are related to case conceptualization
- IE exercises may be rank-ordered and completed gradually
  - Or not
- Repeated and varied contexts
- Might be “stand-alone” exposures
- Might be paired with imaginal or in-vivo exposures (deepened extinction)

Case Conceptualization: Mark

OCD-related beliefs
- Anxiety sensitivity, intolerance of uncertainty

Fear cues
- e.g., Increased heart rate, Feeling hot, Muscle tension, Groin “twinges”

Catastrophic appraisal
- e.g., Sexual arousal, “Proof” of being an animal molester

Anxiety: Fight or Flight Response

Compulsions, avoidance, and other rituals
- e.g., Avoidance, Escape, Checking information online

Treatment Rationale and IE Assessment

- Psychoeducation (thoughts and “fight-or-flight response”)
- Discussed how AS “confirmed” his obsessions
- Explained how resisting anxiety makes anxiety worse
- Provided rationale for exposure (including IE)
  - Correct mistaken beliefs about anxious arousal
  - Learn to accept unexpected body sensations when around animals without resisting or fighting them
Integrated Treatment Plan

- Response prevention
  - Stop avoiding or leaving situation
  - Stop seeking reassurance on the internet
- Exposures
  - IE to increased heart rate, feeling flushed
  - Imaginal exposure to feelings of uncertainty
    - “You’ll never know 100% for sure what you’ll do in the future”
  - Be near animals while experiencing sensations
    - Take girlfriend’s dog on walks unsupervised

Concern 1: IE is dangerous

- Anxiety is natural and adaptive (fight-or-flight)
- Meehl’s (1973) Spun Glass Theory

IE Therapist Survey (Deacon et al., 2011)

- “We’d like you to imagine what might happen if you asked a panic disorder client to complete a hyperventilation IE exercise in the following manner. Specifically, imagine that you asked your client to:
  - Hyperventilate for 30 consecutive minute-long trials
  - Take only a 15-second rest period between each trial to provide a verbal SUDS rating
  - Refrain from using diaphragmatic breathing or other arousal reduction strategies during the exercise
- Imagining you used IE in this manner, please rate the likelihood that the following possible negative outcomes would occur as a result...”
Clinicians’ perceived likelihood of negative outcomes (N= 66 Clinicians)

- 54.9% - The client will prematurely stop exposure.
- 37.1% - The client would drop out of therapy.
- 22.2% - The client’s anxiety would become so high that he or she would decompensate during the session.
- 17.9% - Following the IE exercise, the client’s panic disorder symptoms would worsen.
- 17.3% - The client would pass out/lose consciousness.

Frequency of Negative Outcomes (N=6,545 Patients)

- No negative outcome 6,510 (99.4)
- Client found IE too aversive and dropped out of therapy 89 (1.4)
- Client vomited 7 (0.1)
- Client passed out 2 (0.03)
- Client had a seizure 2 (0.03)
- Client had a heart attack 0 (0)
- Client became psychotic 0 (0)
- Client sued for malpractice 0 (0)
- Client died 0 (0)

Concern 2: IE is Intolerable

- Unpleasant vs. Intolerable
  - *Like going to the dentist...*
- Exposure (including IE) is tolerable and therapeutic
  - *Chance to develop greater distress tolerance*
  - *Learn that anxiety is safe and manageable*
Clinicians’ Solution?

- Conduct IE tasks by yourself to examine own AS and distress tolerance
  - *Exposure therapy for the exposure therapist!*
- Seek supervision and/or consultation during first OCD cases incorporating IE

Tips to Optimize IE for OCD

- Prolonged and intense trials
  - Minimize breaks
- Don’t provide reassurance
  - *Psychoeducation: Therapist provides new information*
  - *During exposure: “I don’t want to be insensitive, but it sounds like you’re looking for reassurance. We’ve already discussed this—you know the answer.”*

Tips to Optimize IE for OCD (continued)

- Determine an appropriate “stopping point”
  - Belief change
  - Distress tolerance
  - NOT SUDS reduction
- Show confidence in IE and patient
  - Early modeling of IE tasks
  - “Bring it on!” attitude (lean in to it!)
  - I know you can do this!