Hoarding 101: A Review of the Fundamentals

October 20, 2016

Peggy Richter MD

Head, Frederick W. Thompson Anxiety Disorders Centre

www.sunnybrook.ca/thompsoncentre
Disclosures

In the last 3 years:

- Research studies funded by Canadian Institutes of Health Research, Ontario Mental Health Foundation, International OCD Foundation, Lundbeck
- Honoraria from Lundbeck
Hoarding 101

- For handouts, questions, inquiries: 
  ThompsonCentreEducation@sunnybrook.ca
  (Please put Hoarding 101 in subject line)

- Frederick W. Thompson Anxiety Disorders Centre
  www.sunnybrook.ca/thompsoncentre
Learning Objectives:

At the end of this session participants will be able to

1) Describe the key clinical features of DSM-5 criteria
2) Use a number of hoarding rating scales helpful in community settings
3) Discuss the different treatment approaches and their effectiveness
DSM-5: Obsessive-Compulsive and Related Disorders

- Obsessive-Compulsive Disorder
- Body Dysmorphic Disorder
- Hoarding Disorder
- Trichotillomania (Hair Pulling Disorder)
- Excoriation (Skin Picking) Disorder
- Substance/Medication-Induced OC and Related Disorder
- OC & Related Disorder Due to Another Medical Condition
- Other Specified OC & Related Disorder
- Unspecified OC & Related Disorder
DSM-5 Hoarding Disorder

A. Persistent difficulty discarding or parting with possessions, regardless of their actual value

B. Difficulty is due to a perceived need to save the items and distress associated with discarding them

C. Results in accumulation of possessions that congest and clutter living areas and substantially compromises their intended use.

D. Clinically significant distress/impairment in social, occupational or other important area of functioning (including maintaining a safe environment for self/others)

E. Not attributable to another medical condition

F. Not better explained by another mental disorder

Specify if: with excessive acquisition
insight is good/fair, poor, absent/delusional
Characteristics of Hoarding

- Community prevalence 1.5-6%
  - Prevalence in OCD: 30%
- Rate increases with age:
  - 2.3% aged 34-44
  - 6.2% among age 55 and above
- Course of illness: typically chronic
- Insight typically develops later
- Average age at treatment = 50

Hoarding Safety Concerns

• Fires
• Falls
  – Consider mobility, frailty, medications, medical conditions, visual or hearing impairment
• Infestations
• Ability to enter and exit the home and essential rooms
  – Kitchen, bathrooms, fire escapes
• Ability to access emergency services
• Hygiene/risk of infection/air quality
City cleans hoarder’s house after lengthy fight

Fire officials are clearing mounds of belongings out of a house in Davisville after a lengthy fight with a hoarder.

Dennis Cibulka says he isn’t a hoarder. The fire department disagrees. Cibulka has been yelling at firefighters for the past three days as they empty mounds of belongings from his Davisville home.

The city boarded up Dennis Cibulka’s home 18 months ago after deeming it a fire hazard. Cibulka, 63, has lived in the house for more than 50 years and says he isn’t a hoarder.

The city boarded up his home 18 months ago after deeming it a fire hazard, said Mr. Cibulka. He said he couldn’t even the debris,” Papapietro said Monday.

More than 50 cats seized from Beach home

The number of cats and kittens linked to a cat hoarder’s Beach house has climbed to more than 50, as of Monday.

The number of caught cats and kittens linked to a Beach house identified by City of Toronto officials as a “cat hoarding site” has climbed to more than 50, as of Monday.

One cat and a kitten were live trapped inside the house Monday by the Ontario SPCA which recently obtained a warrant to enter the Beach Ave. home and set traps.

Windows and doors were locked. On Saturday,
Manifestations of Hoarding:

1. Compulsive Acquiring
2. Saving
3. Disorganization

Steketee & Frost, 2007
Manifestations of Hoarding:

1. Compulsive Acquiring

- Compulsive buying
  - Retail/discount
  - Ebay, web shopping
  - Home shopping network

- Compulsive acquiring of free things
  - Advertising flyers/handouts
  - Give-aways
  - Trash picking, dumpster diving

Manifestations of Hoarding: 2. Saving

- Reasons for saving
  - Sentimental “this helps me remember. This represents my life. It’s part of me.”
  - Instrumental “I might need this. I could fix this. Somebody could use this. Think of the potential!”
  - Intrinsic “Isn’t this beautiful?!?”

- While most people share the same reasons for saving, hoarders apply these reasons to more things

“This reminds me of the day I had lunch with my cousin in California. I might forget about that day if I throw out this receipt”

“These are perfectly good bike parts. Once I fix them, they’ll be perfect for my nephews.”

“I love the glasswork on this vase. I know it’s chipped but it’s still so beautiful”
Manifestations of Hoarding:
3. Disorganization

- **Condition of the home**
  - Clutter
  - Mixture of important and unimportant items

- **Behaviour**
  - Fear of putting things out of sight
  - Indecisiveness – churning
  - Categorization problems

May be slow at completing tasks, frequently late, use circumstantial/over-inclusive language

Steketee & Frost, 2007; Saxena, 2008
Differential Diagnosis of Hoarding Disorder

Mataix-Cols, New England Journal of Medicine 2014
Hoarding may be comorbid with other mental conditions...

- among cases with severe domestic squalor:
  - dementia (22%)
  - schizophrenia/schizoaffective disorder (21%)
  - substance use disorder (10%)
  - OCD most common in cases referred to therapists

- Frost et al, 2011: studied N=217 hoarders
  - 18% hoarders had OCD
  - High comorbidity with depression, anxiety (similar to OCD)
  - Hoarding associated with ADHD (28% vs. 3% in OCD)
Why do people hoard?

- Ethological
- Cognitive
- Neurobiology
- Learning Theory
- Behavioural
- Life Experience
- Genetic
Is Hoarding Genetic?

- Hoarding runs in families
  - 50-85% of hoarders report 1st degree relative who is a “packrat”
  - 26-54% report family members with OCD
- Heritability of hoarding is 71%
- In a study of >5,000 twins, genetic factors accounted for 50% of variance, along with nonshared environmental factors, error
- Genetic studies suggest hoarding ≠ OCD

Saxena, 2008; Mathews et al, 2007; Zhang et al, 2002; Samuels et al, 2007; Iervolino, 2011
Increased hemodynamic activity for patients with hoarding disorder (HD), patients with obsessive-compulsive disorder (OCD), and healthy control subjects (HCs) while deciding about experimenter’s possessions (EPs) vs personal possessions (PPs). Error bars indicate mean (SD).
Hoarding Disorder is associated with difficulties in cognition

- Planning/Decisions
- Visuospatial learning/memory
- Organization
- Attention/Working memory

-May be slow at completing tasks,
-frequently late
-Use circumstantial/over-inclusive language

PATTERNS OF CLINICALLY SIGNIFICANT COGNITIVE IMPAIRMENT IN HOARDING DISORDER
Mackin et al, Depression and Anxiety; 33:211–218 (2016)

Table 2. Rates of cognitive impairment in HD relative to control groups

<table>
<thead>
<tr>
<th>NP test</th>
<th>Control: % impaired &lt;6</th>
<th>HD: % impaired &lt;6</th>
<th>χ²; P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual learning and memory</td>
<td>11.43</td>
<td>24.36</td>
<td>4.14; .04</td>
</tr>
<tr>
<td>BVMT-D</td>
<td>17.14</td>
<td>25.64</td>
<td>1.57; .21</td>
</tr>
<tr>
<td>Verbal learning and memory</td>
<td>6.25</td>
<td>6.41</td>
<td>0.00; .97</td>
</tr>
<tr>
<td>HVLT-D</td>
<td>7.14</td>
<td>6.41</td>
<td>0.03; .86</td>
</tr>
<tr>
<td>Visuospatial processing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block design</td>
<td>0.00</td>
<td>1.30</td>
<td>0.52; .47</td>
</tr>
<tr>
<td>Abstract reasoning</td>
<td>1.45</td>
<td>4.35</td>
<td>0.68; .41</td>
</tr>
<tr>
<td>Similarities</td>
<td>1.85</td>
<td>3.51</td>
<td>0.29; .59</td>
</tr>
<tr>
<td>Matrix reasoning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention/working memory</td>
<td>0.00</td>
<td>0.00</td>
<td>na</td>
</tr>
<tr>
<td>Digit-span</td>
<td>2.90</td>
<td>0.00</td>
<td>0.68; .41</td>
</tr>
<tr>
<td>Letter-number sequencing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information processing speed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDMT</td>
<td>7.14</td>
<td>15.38</td>
<td>2.47; .12</td>
</tr>
<tr>
<td>Stroop CW</td>
<td>2.94</td>
<td>5.13</td>
<td>0.44; .51</td>
</tr>
<tr>
<td>Visual</td>
<td>12.50</td>
<td>26.92</td>
<td>3.20; .07</td>
</tr>
<tr>
<td>detection/perseveration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPT hit-rate (SS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPT perseveration (SS)</td>
<td>17.50</td>
<td>17.95</td>
<td>0.00; .96</td>
</tr>
<tr>
<td>CPT detectability (SS)</td>
<td>0.00</td>
<td>8.97</td>
<td>3.81; .05</td>
</tr>
<tr>
<td>Visual categorization and problem solving</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D-KEFS correct/attempted</td>
<td>15.71</td>
<td>29.87</td>
<td>4.13; .04</td>
</tr>
<tr>
<td>D-KEFS incorrect</td>
<td>8.57</td>
<td>22.08</td>
<td>5.07; .02</td>
</tr>
<tr>
<td>Tower test</td>
<td>2.50</td>
<td>8.33</td>
<td>1.42; .29</td>
</tr>
</tbody>
</table>

HD, hoarding disorder; HVLT, Hopkins Verbal Learning Test; BVMT, Brief Visuospatial Memory Test; SDMT, Symbol Digit Modalities Test; CPT, Conners’ Continuous Performance Test; D-KEFS, Delis–Kaplan Executive Function System.

Figure 1. Percent of participants with clinically significant impairment on selected neuropsychological measures. HD, hoarding disorder; BVMT, Brief Visuospatial Memory Test; D-KEFS, Delis–Kaplan Executive Function System; Blue, HD participants; Red, Control participants.
Error-related brain activity dissociates hoarding disorder from obsessive-compulsive disorder

Fig. 1. Left: Grand average ERP waveforms. Grand average ERP waveforms for response-locked error trials for age-matched healthy control (HC; blue), hoarding disorder (HD; green), co-morbid HD and obsessive-compulsive disorder (HD+OCD; magenta) and obsessive-compulsive disorder (OCD; red) participants. Waveforms are from FCz (indicated by red dot on topographic maps). The x-axis presents time in milliseconds from −100 ms (pre-response) to 750 ms (post-response) relative to the button press at 0 ms (vertical dotted line). The y-axis presents amplitude in microvolts (μV). Right: Scalp topography maps display error-related negativity (ERN) amplitudes averaged over a time window centered on the grand mean ERP peak latency (50–60 ms after the response event). Color bar indicates amplitude values in μV. Note the frontocentral distribution of the ERN, and the attenuated ERN for HD-positive individuals relative to HC and OCD groups for the 25% (top panel) and the 75% (bottom panel) probability conditions in incongruent trials.

Fig. 2. Mean (± s.e.) error-related negativity (ERN) amplitude age-corrected z scores, averaged across probability and electrode in incongruent trials, plotted for each group. Note larger age-corrected ERN deficits (i.e. less negative ERN) in HD-positive individuals relative to HC and OCD participants. HC, Healthy controls; HD, hoarding disorder; HD+OCD, co-morbid hoarding disorder and obsessive-compulsive disorder; OCD, obsessive-compulsive disorder.
Hoardings
Assessment and Rating Scales
Assessing Potential Hoarders

• Questions to ask someone who acknowledges “clutter”:
  – Are your belongings in piles along the sides of some/most rooms? How high?
  – Are you limited to pathways in some rooms?
  – Or are you walking on “goat paths” over piles?
  – Are any rooms so cluttered that they’re difficult to use/unusable? i.e. no longer sleeping in bed, kitchen too full to use, no access to bathtub?
  – Do you feel your clutter is a problem?
  – Are you willing to work on getting rid of things?
Clutter Image Rating Scale: Kitchen

Please select the photo below that most accurately reflects the amount of clutter in your room.
Clutter Image Rating: Living Room

Please select the photo below that most accurately reflects the amount of clutter in your room.
Clutter Image Rating: Bedroom

Please select the photo that most accurately reflects the amount of clutter in your room.
# Assessment Tools

**HOMES® Multi-disciplinary Hoarding Risk Assessment**

## Health
- Cannot use bathtub/shower
- Cannot access toilet
- Garbage/Trash Overflow
- Cannot prepare food
- Cannot sleep in bed
- Presence of spoiled food
- Presence of feces/Urine (human or animal)
- Presence of insects/rodents
- Presence of mold or chronic dampness

**Notes:**

## Obstacles
- Cannot move freely/safely in home
- Inability for EMT to enter/gain access
- Unstable piles/avalanche risk
- Egresses, exits or vents blocked or unusable

**Notes:**

## Mental Health
(Note that this is not a clinical diagnosis; use only to identify risk factors)
- Does not seem to understand seriousness of problem
- Defensive or angry
- Unaware, not alert, or confused
- Does not seem to accept likely consequence of problem
- Anxious or apprehensive

**Notes:**

## Endangerment
(evaluate threat based on other sections with attention to specific populations listed below)
- Threat to health or safety of child/minor
- Threat to health or safety of person with disability
- Threat to health or safety of older adult
- Threat to health or safety of animal

**Notes:**

## Structure & Safety
- Unstable floorboards/stairs/porch
- Leaking roof
- Electrical wires/cords exposed
- No running water/plumbing problems
- Flammable items beside heat source
- Caving walls
- No heat/electricity
- Blocked/unsafe electric heater or vents
- Storage of hazardous materials/weapons

**Notes:**
Hoarding Rating Scale

Please use the following scale when answering items below:

0 = no problem
2 = mild problem, occasionally (less than weekly) acquires items not needed, or acquires a few unneeded items
4 = moderate, regularly (once or twice weekly) acquires items not needed, or acquires some unneeded items
6 = severe, frequently (several times per week) acquires items not needed, or acquires many unneeded items
8 = extreme, very often (daily) acquires items not needed, or acquires large numbers of unneeded items

1. Because of the clutter or number of possessions, how difficult is it for you to use the rooms in your home?

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all Difficult</td>
<td>Mild</td>
<td>Moderate</td>
<td>Severe</td>
<td>Extremely Difficult</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

2. To what extent do you have difficulty discarding (or recycling, selling, giving away) ordinary things that other people would get rid of?

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>No difficulty</td>
<td>Mild</td>
<td>Moderate</td>
<td>Severe</td>
<td>Extremely Difficult</td>
<td></td>
<td></td>
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</tbody>
</table>

3. To what extent do you currently have a problem with collecting free things or buying more things than you need or can use or can afford?

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Mild</td>
<td>Moderate</td>
<td>Severe</td>
<td>Extremely</td>
<td></td>
<td></td>
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</tbody>
</table>

4. To what extent do you experience emotional distress because of clutter, difficulty discarding or problems with buying or acquiring things?

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>None/ Not at all</td>
<td>Mild</td>
<td>Moderate</td>
<td>Severe</td>
<td>Extreme</td>
<td></td>
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</tbody>
</table>

5. To what extent do you experience impairment in your life (daily routine, job / school, social activities, family activities, financial difficulties) because of clutter, difficulty discarding, or problems with buying or acquiring things?

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>None/ Not at all</td>
<td>Mild</td>
<td>Moderate</td>
<td>Severe</td>
<td>Extreme</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Interpretation of HRS Total Scores: (Tolin et al., 2010)

Mean for Nonclinical samples: HRS Total = 3.34; standard deviation = 4.97.
Mean for people with hoarding problems: HRS Total = 24.22; standard deviation = 5.67.

Analysis of sensitivity and specificity suggest an HRS Total clinical cutoff score of 14.

Criteria for Clinically Significant Hoarding: (Tolin et al., 2008)
A score of 4 or greater on questions 1 and 2, and a score of 4 or greater on either question 4 or question 5.

Five Levels

The ICD has established five levels to indicate the degree of household clutter and/or hoarding from the perspective of a professional organizer or related professional.

The levels in the scale are progressive, with Level I as the lowest and Level V the highest. The ICD considers Level III to be the pivot point between a household that might be assessed as cluttered, and a household assessment that may require the deeper considerations of working in a hoarding environment.

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>COLOR</th>
<th>LEVEL OF CLUTTER–HOARDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>GREEN</td>
<td>LOW</td>
</tr>
<tr>
<td>II</td>
<td>BLUE</td>
<td>GUARDED</td>
</tr>
<tr>
<td>III</td>
<td>YELLOW</td>
<td>ELEVATED</td>
</tr>
<tr>
<td>IV</td>
<td>ORANGE</td>
<td>HIGH</td>
</tr>
<tr>
<td>V</td>
<td>RED</td>
<td>SEVERE</td>
</tr>
</tbody>
</table>
OCD Treatment Guidelines

- CPA Guidelines – 2006
- NICE (National Institute for Health and Clinical Excellence) Guidelines – 2005
- APA Guidelines – 2007
- Canadian Clinical Practice Guidelines – 2014 BMC Psychiatry

Hoarding Treatment Guidelines...?
Medications for Hoarding

• SSRIs
  – Generally very well tolerated
  – Effective for common comorbidity
  – BUT may have limited efficacy for hoarding!

  - Citalopram (Celexa)
  - Escitalopram (Cipralex)
  - Fluvoxamine (Luvox)
  - Fluoxetine (Prozac)
  - Sertraline (Zoloft)
  - Paroxetine (Paxil)
Do Existing Treatments Work???
Meta-analysis: hoarding symptoms associated with poor treatment outcome in obsessive–compulsive disorder

MH Bloch¹, CA Bartley², L Zipperer², E Jakubovski², A Landeros-Weisenberger², C Pittenger¹,³ and JF Leckman³,⁴

*Molecular Psychiatry* advance online publication, 10 June 2014; doi:10.1038/mp.2014.50

<table>
<thead>
<tr>
<th>Study</th>
<th>OR (95% CI)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Behavioral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Olino, 2011</td>
<td>0.56 (0.25 to 1.26)</td>
<td>4.8%</td>
</tr>
<tr>
<td>Meyer, 2010 - MI + GCBT</td>
<td>0.83 (0.38 to 1.65)</td>
<td>5.0%</td>
</tr>
<tr>
<td>Meyer, 2010 - GCBT</td>
<td>0.61 (0.27 to 1.37)</td>
<td>4.9%</td>
</tr>
<tr>
<td>Raffin, 2009</td>
<td>0.93 (0.48 to 1.80)</td>
<td>7.3%</td>
</tr>
<tr>
<td>Storch, 2009</td>
<td>0.50 (0.15 to 1.70)</td>
<td>2.2%</td>
</tr>
<tr>
<td>Rufer, 2006</td>
<td>0.35 (0.12 to 0.99)</td>
<td>2.9%</td>
</tr>
<tr>
<td>Abramowicz, 2003</td>
<td>0.31 (0.10 to 0.95)</td>
<td>2.5%</td>
</tr>
<tr>
<td>Mataix-Cols, 2002</td>
<td>0.37 (0.12 to 1.17)</td>
<td>2.5%</td>
</tr>
<tr>
<td></td>
<td>0.60 (0.43 to 0.82)</td>
<td>32%</td>
</tr>
<tr>
<td><strong>Combination</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maher, 2010</td>
<td>0.23 (0.05 to 0.98)</td>
<td>1.5%</td>
</tr>
<tr>
<td>Salomoni, 2009</td>
<td>0.24 (0.08 to 0.72)</td>
<td>2.6%</td>
</tr>
<tr>
<td>Matsunaga, 2008</td>
<td>0.44 (0.29 to 0.67)</td>
<td>17.5%</td>
</tr>
<tr>
<td>Storch, 2008</td>
<td>1.68 (0.55 to 5.09)</td>
<td>2.6%</td>
</tr>
<tr>
<td>Ferrao, 2006</td>
<td>1.91 (0.53 to 6.84)</td>
<td>2.0%</td>
</tr>
<tr>
<td>Saxena, 2002</td>
<td>0.48 (0.19 to 1.23)</td>
<td>3.7%</td>
</tr>
<tr>
<td>Black, 1998</td>
<td>0.11 (0.02 to 0.50)</td>
<td>1.3%</td>
</tr>
<tr>
<td></td>
<td>0.47 (0.34 to 0.65)</td>
<td>31%</td>
</tr>
<tr>
<td><strong>Pharmacotherapy</strong></td>
<td></td>
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</tr>
<tr>
<td>Landeros, 2010</td>
<td>0.67 (0.11 to 4.07)</td>
<td>1.0%</td>
</tr>
<tr>
<td>Masi, 2009</td>
<td>0.15 (0.04 to 0.57)</td>
<td>1.9%</td>
</tr>
<tr>
<td>Stein, 2008</td>
<td>0.49 (0.30 to 0.81)</td>
<td>12.7%</td>
</tr>
<tr>
<td>Stein, 2007</td>
<td>0.56 (0.03 to 0.97)</td>
<td>11.0%</td>
</tr>
<tr>
<td>Shetti, 2005</td>
<td>0.47 (0.15 to 1.54)</td>
<td>2.3%</td>
</tr>
<tr>
<td>Ezegovesi, 2001</td>
<td>0.51 (0.20 to 1.36)</td>
<td>3.4%</td>
</tr>
<tr>
<td>Mataix-Cols, 1999</td>
<td>0.32 (0.14 to 0.73)</td>
<td>4.6%</td>
</tr>
<tr>
<td></td>
<td>0.46 (0.34 to 0.62)</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>0.50 (0.42 to 0.60)</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 2.** Treatment response in OCD patients with hoarding symptoms compared to OCD patients without hoarding symptoms. Forest Plot examining likelihood of treatment response in OCD patients with hoarding symptoms compared to OCD patients without hoarding symptoms. OCD patients with hoarding symptoms had a significantly poorer treatment response overall and across treatment modalities. There was evidence of significant heterogeneity between trials.
Venlafaxine extended-release treatment of hoarding disorder
Sanjaya Saxena and Jennifer Sumner
International Clinical Psychopharmacology 2014, Vol 29 No 5

Hoarding disorder, classified as a separate diagnosis in the Diagnostic and Statistical Manual, 5th ed. (DSM-5), is a common, chronic, and disabling syndrome that can be difficult to treat. One previous study prospectively evaluated the effectiveness of pharmacotherapy in compulsive hoarding. Although hoarders responded as well to paroxetine as nonhoarding obsessive-compulsive disorder patients, paroxetine was not well tolerated by the hoarders. In the current study, we conducted an open-label trial of venlafaxine extended-release for hoarding disorder. Twenty-three patients met the DSM-5 criteria for hoarding disorder and were treated with venlafaxine extended-release for 12 weeks. All patients were free of psychotropic medications for at least 6 weeks before the study. No other psychotropic medications, cognitive-behavioral therapy, organizers, or cleaning crews were permitted during the study. To measure the severity of hoarding, the Saving Inventory-Revised (SI-R) and the UCLA Hoarding Severity Scale (UHSS) were administered. Completed treatment. Hoarding symptoms improved significantly, with a mean 36% decrease in UHSS scores and a mean 32% decrease in SI-R scores. Sixteen of the 23 completers (70%) were classified as responders to venlafaxine extended-release. These results suggest that venlafaxine extended-release may be effective for the treatment of hoarding disorder.

Keywords: compulsive, disorder, extended-release, hoarding, pharmacotherapy, treatment, venlafaxine

Department of Psychiatry, UC San Diego School of Medicine, San Diego, California, USA

Correspondence to Sanjaya Saxena, MD, Department of Psychiatry, UC San Diego School of Medicine, 140 Arbor Drive, San Diego, CA 92103, USA
Tel: +1 619 534 6883; fax: +1 619 543 7597; e-mail: ssaxena@ucsd.edu

Received 30 August 2013 Accepted 25 February 2014
Atomoxetine for hoarding disorder: A pre-clinical and clinical investigation

Giacomo Grassi a, b, *, Laura Micheli c, Lorenzo Di Cesare Mannelli c, Elisa Companno a, Lorenzo Righi d, Carla Ghelardini c, Stefano Pallanti a, b

a University of Florence, Department of Neuroscience, Psychology, Drug Research and Child Health, Neurofarba, via delle Gore 2H, 50141, Florence, Italy
b Institute of Neuroscience, via La Marmora 24, 50121, Florence, Italy
c Department of Neuroscience, Psychology, Drug Research and Child Health, Neurofarba, Pharmacology and Toxicology Section, University of Florence, Florence, Italy
d University of Siena, Department of Molecular and Developmental Medicine, Siena, Italy

ARTICLE INFO

Article history:
Received 2 June 2016
Received in revised form
9 September 2016
Accepted 13 September 2016

Keywords:
Hoarding disorder
Atomoxetine
Marble burying test
Compulsivity
Impulsivity
Attention

ABSTRACT

Despite several studies suggested that inattention and impulsivity-compulsivity could represent two core dimensions of hoarding disorder (HD), only a small case series study investigated the effectiveness of attention-deficit-hyperactivity-disorder (ADHD) medications in HD. The aim of the present study was to target attentional and inhibitory control networks in HD patients through the ADHD medication atomoxetine, moving from a preclinical investigation on an animal model of compulsive-like behavior (marble burying test) to a clinical investigation on both medicated and unmedicated patients with a primary diagnosis of HD without ADHD. Our preclinical investigation showed that acute administration of atomoxetine significantly reduced the compulsive-like behaviours of mice in the marble burying test without affecting neither locomotor activity and coordination nor exploration behaviours. When compared, atomoxetine and fluoxetine showed similar effects on the marble burying test. However, fluoxetine impaired both locomotor and exploratory activity. In our clinical investigation 12 patients were enrolled and 11 patients completed an open trial with atomoxetine at flexible dose (40–80 mg) for 12 weeks. At the endpoint the mean UCLA Hoarding Severity Scale score decreased by 41.3% for the whole group (p = 0.003). Six patients were classified as full responders (mean symptom reduction of 57.2%) and three patients as partial responders (mean symptom reduction of 27.3%). Inattentive and impulsivity symptoms showed a significant mean score reduction of 18.5% from baseline to the endpoint ($F_{1,9} = 20.9$, $p = 0.0013$). Hoarding symptoms improvement was correlated to reduction of patients' disability and increased in their global functioning. These preclinical and clinical data suggest that atomoxetine may be effective for HD and therefore should be considered for future controlled trials.

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Cognitive Behavioural Therapy for Hoarding Disorder
CBT for Hoarding Disorder: The Good News for Individual, Group and Bibliotherapy

% SI–R Reduction

- Individ (Steketee 2010): 27%
- Group (Muroff 2012): 30%
- Group (Gilliam 2011): 27%
- Group (Muroff 2009): 22%
- BiT Workshop (Frost 2012): 24%
- Biblio (Muroff 2012): 9%

Courtesy of Dr. Gail Steketee
Hoardings Disorder: The Bad News

Not Remitted, 71%
Remitted, 29%
GCBT (Muroff et al., 2012)

Not Remitted, 70%
Remitted, 30%
ICBT (Tolin et al., 2007)

Not Remitted, 61%
Remitted, 39%
ICBT (Steketee et al., 2010)

Courtesy of Dr. Gail Steketee
COGNITIVE BEHAVIORAL THERAPY FOR HOARDING DISORDER: A META-ANALYSIS

Tolin et al, 2007; Steketee et al, 2010; Gilliam et al, 2011; Muroff et al, 2009; Muroff et al, 2012; Ayers et al, 2011; Turner et al, 2010; Frost et al, 2012a,b,c
CBT for Hoarding

Must target:
1. Acquiring  
2. Discarding  
3. Clutter

Core components:

- **Psychoeducation**
- **Skills Training**
  - Organizing
  - Problem Solving/Decision-making
- **Behavioural exposures**
  - Discarding
  - Non-acquiring
- **Cognitive strategies**

Steketee & Frost, 2007; Muroff et al, 2009
Thinking about Change

Use this handout to help decide if this is the right time (or not) to address your clutter. Consider the options and weigh the pros and cons. For use by: Helpers, Therapists

Pros and Cons - List the pros and cons of not changing anything about your home or clutter habits:

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: “I do not have to face the thought of discarding anything…”</td>
<td>Example: “I’m not comfortable inviting people over…”</td>
</tr>
</tbody>
</table>

Benefits and Costs - List the benefits and costs of making a change to address the clutter:

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: “I can try something new…”</td>
<td>Example: “This will take a lot of time…”</td>
</tr>
</tbody>
</table>

Strengths - List the strengths in yourself and the situation that would help you make a change:

<table>
<thead>
<tr>
<th>Strengths in Myself</th>
<th>Strengths in the Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: “I have a sense of humour…”</td>
<td>Example: “There are large recycling bins downstairs…”</td>
</tr>
</tbody>
</table>

Enhancing Motivation

- Pros/Cons analysis

- Motivational Interviewing
Treatment rules

- Therapist does not touch possessions without permission
- All decisions made by the client
- Only Handle It Once
- Categories established first
- Help client establish own rules for saving and discarding
- Clients must think aloud while sorting possessions
- Treatment proceeds systematically
- In = Out
  - Tackle excessive acquiring early!

Steketee & Frost, 2007
Have you sought psychiatric help for hoarding dogs?

Hoardings psychiatrists got too expensive.
Skills Training
Organization: Categorization and sorting

• Categorize unwanted items
  – Trash, recycle donate, sell, undecided
  – Develop list of items to be removed
  – Develop action plan for removing items

• Define categories for saved objects
  – Keep similar items together
  – Choose limited number of locations for each category
  – Help client select final locations for categories of items
# Personal Organizing Plan

**Target Area:**

<table>
<thead>
<tr>
<th>Item Category</th>
<th>Final Location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tbody>
</table>

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[Logo: Sunnybrook Health Sciences Centre]
Questions for Sorting

• Have you used this in the last year?
  – Avoid keeping things you *might* use

• Do you really need this?
  – If you get rid of it, what’s the worst that would happen?
  – Could you get/borrow it elsewhere if needed?

• How many of these do you already have?
  – i.e. Light casual black sweaters, heavy casual black sweaters, light dressy black sweater...

• Does this fit with your vision, your values, or your key needs?
  – Would letting go of this help with your clutter problem?

Steketee & Frost, 2007; Community Clutter & Hoarding Handbook, 2011; Dinning, 2006
Behavioural Exposures
## Discarding Hierarchy

<table>
<thead>
<tr>
<th>Item</th>
<th>SUDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textbooks</td>
<td>85</td>
</tr>
<tr>
<td>Book (general reading)</td>
<td>80</td>
</tr>
<tr>
<td>Clothing</td>
<td>75</td>
</tr>
<tr>
<td>Purses</td>
<td>65</td>
</tr>
<tr>
<td>Recent newspapers</td>
<td>50</td>
</tr>
<tr>
<td>Recent flyers</td>
<td>35</td>
</tr>
<tr>
<td>Old newspapers (5+ years)</td>
<td>25</td>
</tr>
<tr>
<td>Old flyers (5 + years)</td>
<td>10</td>
</tr>
</tbody>
</table>
## Acquiring Hierarchy

<table>
<thead>
<tr>
<th>Item</th>
<th>SUDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking out without the object</td>
<td>85</td>
</tr>
<tr>
<td>Walking away from item</td>
<td>80</td>
</tr>
<tr>
<td>Putting object back</td>
<td>75</td>
</tr>
<tr>
<td>Touching object you want</td>
<td>65</td>
</tr>
<tr>
<td>Seeing something you want</td>
<td>50</td>
</tr>
<tr>
<td>Walking into store</td>
<td>35</td>
</tr>
<tr>
<td>Standing outside store</td>
<td>25</td>
</tr>
<tr>
<td>Driving past a store</td>
<td>10</td>
</tr>
</tbody>
</table>

SUDS = Subjective Units of Distress Scale
Personal Rules for Acquiring

- I must have
  - An immediate use for it
  - Time to deal with it appropriately
  - Money to afford it comfortably
  - Space to put it

Steketee & Frost, 2007
Cognitive Strategies

Changing Attachments to Possessions
Beliefs

• Fears of mistakes/decisions
• Responsibility (guilt) for objects & people
• Opportunity
• Memory
• Identity
• Unique/one of a kind
• Completeness
• Control
### Cognitive Restructuring: Thought Record

<table>
<thead>
<tr>
<th>Situation</th>
<th>Moods</th>
<th>Automatic Thoughts</th>
<th>Evidence for Hot Thought</th>
<th>Evidence vs. Hot Thought</th>
<th>Alternative/Balanced Thoughts</th>
<th>Rate Mood Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throwing out a newspaper</td>
<td>Anxiety (70%)</td>
<td>If I throw this out I won’t know this information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sadness (50%)</td>
<td>I won’t know what’s going on in the world</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>If I don’t know everything in the news then others will think I am a stupid person</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Throwing out a newspaper| Anxiety (70%) | If I throw this out I won’t know this information |                          |                          |                               |               |
|                          | Sadness (50%) | I won’t know what’s going on in the world |                          |                          |                               |               |
|                          |               | If I don’t know everything in the news then others will think I am a stupid person |                          |                          |                               |               |
When Hoarding Compromises Safety....

• Forced “clean out” is the last resort
  – i.e. when poses fire/health hazard (vermin, rodents, toxins, or risk of falls)
  – POOR outcome long-term

• Consider risk management approach if possible
  – Slow gradual steps to establish trust, working relationship
  – Gradual reduction of risk
Hoarding Disorder - Summary

- Hoarding is common, chronic, and associated with very significant risk to hoarders and those around them

- Outcome with conventional OCD treatment (medication or CBT) is poor

- Group CBT protocols developed for hoarding result in
  - >70% improved/much improved
  - 30% remission rate
  - >25% reduction in severity
Hoarding Disorder - Summary

- Specialized CBT is an effective treatment, while forced clean-outs are considered a last resort.

- CBT should address:
  - Discarding
  - Acquiring
  - Skills Training (organization, problem solving)
An Examination of Physical Exercises in OCD: Treatment Efficacy, Additive Benefits to CBT and Cognitive Correlates of Change

Cognitive Behavioural Therapy (CBT) is a proven effective treatment in the symptoms of OCD. Additionally, emerging evidence for the role of exercise in treating anxiety and depression suggests that regular aerobic exercise may also relieve some symptoms of the disorder. OCD has been shown to be associated with a number of cognitive vulnerabilities, although there has been less research on whether or not current treatments impact on these underlying cognitive vulnerabilities. If CBT, exercise alone, or a combination of the two can lead to improvements in the associated cognitive vulnerability as the non-medication help to show that non-medication viable treatment option.
Peer support now available in Toronto....

**Clearing The Clutter**

A free peer support group for people living with hoarding tendencies. No registration required.

**Meetings:** 1st, 3rd & 4th Thursdays of each month from 7:00-9:00pm

36 Eglinton Ave. W., Suite 602, Toronto

If you have any questions please call 416-486-8046

For the current monthly calendar, please visit www.mooddisorders.on.ca

Artist: www.jamesgulliverhancock.com
On-line resources.net

Hoardings Disorder

- www.hoarding.iocdf.org (Hoardings: International Obsessive Compulsive Compulsive Foundation)

- www.sunnybrook.ca/thompsoncentre (Frederick W. Thompson Anxiety Disorders Centre)

- www.childrenofhoarders.com

- www.vha.ca/thssn (Toronto Hoarding Support Services Network at VHA)
Self Help Books for Hoarding & OCD


Compulsive Hoarding and Acquiring (client and therapist workbooks)
Steketee & Frost, Oxford University Press, 2007

Treatment for Hoarding Disorder
Steketee & Frost, Oxford University Press, 2013

Overcoming Compulsive Hoarding
Neziroglu, Bubrick & Yaryura-Tobias, New Harbinger Press, 2004

Stuff: Compulsive Hoarding and the Meaning of Things
Steketee & Frost, 2011

Digging Out
Tompkins, Hartl, Frost & Steketee, 2009


Overcoming Obsessive Thoughts: How to Gain Control of Your OCD. Purdon & Clark (2005)

When Perfect Isn’t Good Enough. Antony & Swinson (2009)
Hoarding 101

• For handouts, questions, inquiries:
  ThompsonCentreEducation@sunnybrook.ca
  (Please put Hoarding 101 in subject line)
Thank you!