Hoardning Disorder

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Objectives

• Discuss a brief history of hoarding
• Review DSM 5 criteria for Hoarding Disorder
• Understand how “organic” hoarding behaviors differ from Hoarding Disorder
• Discuss applicable screening methods
• Identify the most common comorbid diagnoses
• Discuss unique neurophysiology seen in hoarding
• Discuss current treatment modalities
Hoarding = Storing

For future use

Satisfaction of possessing items
Nikolai Gogol's novel, *Dead Souls*, describes an elderly, landowner named Plushkin.

He lived in a house with old silver, glassware, jewelry, oil paintings, and china, old rags, manuscripts, broken furniture, old clothes, shoes, and rugs.

These things occupy most of the space in his house to the point where it is almost uninhabitable.
• Freud believed hoarding arose from anal stage
• An anally retentive child might become obsessively controlling as an adult
• This could lead to possessiveness of objects
• “a more acceptable alternative to saving excrement”
Erich Fromm

- Hoarders have “miserly disposition” and place importance on possessing both the tangible (clothing, cars, money) and the intangible (love of others)
- Acquiring and saving objects creates a secure, fortified position for the hoarder who views the outside world with suspicion and fear
- Many of Fromm’s characteristics of hoarders are similar to those with OCD today: obsession with order and compulsive cleaning
Collyer Brothers

• 1947: police called to home of Collyer Brothers in Manhattan, NY “awful odor”
  – Homer and Langley
  – Took 16 days to find body Langley, just 10 feet from where Homer had died

• 130 tons were removed, salvageable items brought $2000 at auction
  – 25,000 books, 14 pianos
  – Newspapers, magazines, human organs in jars
A Case Report

• 1966: Hamburger Hoarding: A Case of Symbolic Cannibalism Resembling Whitico Psychosis was the first article to describe a psychopathological phenomenon
  – Schizophrenic woman hoarded raw hamburger
  – Described by the authors as one of the more “unusual and bizarre symptoms and behaviors” associated with schizophrenia
• In 1996, there were fewer than 10 articles on Hoarding
• By 2000, nearly 20 per year were being published
• In 2001, MSNBC featured Hoarding for the first time on US television
  • Hoarders
  • Hoarding: Buried Alive
  • Clutter
  • Clean Sweep
  • Clean House
  • My Hoarder Mum and Me (BBC)
  • Life Laundry
  • The Hoarder Next Door (BBC)
  • Confessions: Animal Hoarding
DSM IV

- Hoarding is listed as one of the eight diagnostic criteria for Obsessive Compulsive Personality Disorder
  - “is unable to discard worn-out or worthless objects even when they have no sentimental value”
- It is not directly mentioned as a symptom of OCD
- Differential Diagnosis: OCD vs. OCPD
  - a diagnosis of OCD should be considered especially when hoarding is extreme
- Thus, DSM IV assumes that in severe cases, hoarding can be a symptom of OCD
DSM 5: Obsessive- Compulsive and related Disorders

• Obsessive-Compulsive Disorder
• Body Dysmorphic Disorder
• Trichotillomania
• Excoriation disorder
• Hoarding Disorder
• Obsessive Compulsive and related disorder
  – Substance/medication induced
  – due other medical condition
  – Unspecified
Hoarding Disorder

• A: *Persistent* difficulty *discarding* or parting with possessions, regardless of their actual value

• B: This is due to perceived need to save items and the *distress* associated with *discarding* them
  – Perceived utility or aesthetic value
  – Strong sentimental attachment
  – Feeling responsible for the fate of the item
  – Fear of losing important information
Hoardings Disorder con’t

• C: Difficulty discarding results in accumulation of possessions that congest and clutter *active* living areas and substantially compromises their intended use.

• D: The hoarding causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

• E: The hoarding is not attributable to another medical condition.

• F: The hoarding is not better explained by the symptoms of another mental disorder.
Specifiers

- **With excessive acquisition**: If difficulty discarding possessions is accompanied by excessive acquisition of items that are not needed or for which there is no available space
  - 80-90% display excessive acquisition
  - Excessive buying > acquisition of free items (leaflets, items discarded by others)
  - Stealing is less common
Specifiers

• **With good or fair insight:** recognizes that hoarding behaviors are problematic

• **With poor insight:** individual is *mostly* convinced that hoarding is *not* problematic despite evidence to the contrary

• **With absent insight/delusional beliefs:** *completely* convinced hoarding is not problematic despite evidence to the contrary
Hoarding Disorder

- The prevalence of Hoarding Disorder is unknown
  - clinically significant hoarding is estimated to be in prevalent in 2–5% of the general population

- Prevalence in males and females is likely equal
  - Clinical samples are predominantly female
  - Females more likely to display excessive acquisition

- Onset of symptoms in childhood or adolescence
  - Few report onset after 20’s
  - Severe levels of hoarding typically start in the 30’s and increase in severity with each decade
Morbidity

- 50% are unable to use their stovetops, refrigerators, bathtubs, or sinks
- 10% are unable to use the toilet
- Many unable to sleep in beds
- Often cannot heat or cool homes
- Average of 7.0 work days per month
- 6% of cases reported to health departments pose significant health risk to the individual
ALTERNATIVE TYPES OF HOARDING
“Organic” Hoarding

• Accumulation of objects by people known to have brain pathology/lesions
  – Alzheimer’s dementia, frontotemporal dementia
  – Traumatic Brain Injury
  – Surgical resection of brain tumor
  – CNS infections (HSV encephalitis)
  – Prader-Willi Syndrome
“Organic” Hoarding

- Sudden onset or insidious if secondary to a dementia at LATER age
- Often includes food, often rotten food
- Hoarding is devoid of identifiable cognitive/emotional processes
- Generally indiscriminate, Often purposeless (no interest in items)
- Variability to discard items
- Squalid living conditions/self neglect
- Severe personality changes
- Poor or absent insight
“Organic” Hoarding

• 1975: Diogenes Syndrome
  – Also called Senile Squalor Syndrome
  – Described among elderly patients in UK
  – Hoarding of trash
  – Marked by extreme self neglect, poor health,
  – They showed no shame, poor insight
  – Most had frontal lobe damage

Animal Hoarding

• Accumulation of a large number of animals and failure to provide minimal standards of nutrition, sanitation, and veterinary care
• Failure to act on deteriorating condition of the animals and environment
• Most who hoard animals, also hoard objects
• Dogs and Cats are most common
• Middle aged/older females, often retired or disabled, living alone

Animal Hoarding

• Early Developmental Deprivation
  – Unable to establish close human relationships
  – Desire unconditional love from animals

• Addictions Model
  – Preoccupation with animals
  – Denial of a problem

• Delusional Disorder
  – Believe they can communicate/empathize
  – Insist animals are well cared for

ASSESSMENT OF HOARDING
Assessment of Hoarding

• A number of early studies relied on two hoarding items from Y-BOCS checklist to identify hoarding cases
  – thoughts associated with hoarding rarely fit definition of obsessions
  – compulsions do not accurately capture the experience of hoarding
  – No information regarding severity of the behavior
Assessment of Hoarding

- Saving Inventory-Revised
  - Most widely used self report measure of hoarding
  - 23 item questionnaire, three subscales
    - Acquisition
    - Difficulty Discarding
    - Clutter
  - Items scored 0-4, total scores 0-92
  - Extensive data supports reliability and validity
For each question below, circle the number that corresponds most closely to your experience **DURING THE PAST WEEK**.

<table>
<thead>
<tr>
<th>Score</th>
<th>None</th>
<th>A little</th>
<th>A moderate amount</th>
<th>Most/ Much</th>
<th>Almost All/ Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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</tbody>
</table>

1. How much of the living area in your home is cluttered with possessions? (Consider the amount of clutter in your kitchen, living room, dining room, hallways, bedrooms, bathrooms, or other rooms).

2. How much control do you have over your urges to acquire possessions?

3. How much of your home does clutter prevent you from using?

4. How much control do you have over your urges to save possessions?

5. How much of your home is difficult to walk through because of clutter?
For each question below, circle the number that corresponds most closely to your experience **DURING THE PAST WEEK**.

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>Mild</td>
<td>Moderate</td>
<td>Considerable/ Severe</td>
<td>Extreme</td>
</tr>
<tr>
<td>6. To what extent do you have difficulty throwing things away?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. How distressing do you find the task of throwing things away?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. To what extent do you have so many things that your room(s) are cluttered?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. How distressed or uncomfortable would you feel if you could not acquire something you wanted?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. How much does clutter in your home interfere with your social, work or everyday functioning? Think about things that you don’t do because of clutter.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. How strong is your urge to buy or acquire free things for which you have no immediate use?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
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Hoarding Inventory Scale

• 5 Questions total
  – 3/5 address main features of hoarding: clutter, difficulty discarding, excessive acquisition
  – 2/5 assess distress and impairment

• Excellent internal and test-retest reliability
Hoarding Inventory Scale

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

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

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?

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

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?
COMORBID DIAGNOSES
Hoarding and OCD

- Hoarding CAN be a symptom of OCD
- 5-10% of OCD patients hoard
- Most individuals with Hoarding problems DO NOT meet criteria for OCD (85%)
- Several other disorders are diagnosed more frequently than OCD in Hoarding Disorder
- Recruits from OCD clinics will not represent the majority of people with Hoarding Disorder
Comorbidities

- 75% have comorbid mood/anxiety disorder
- Major Depressive Disorder is the most comorbid condition among HD patients
  - More than 50% receive this diagnosis
- Social Phobia (25%)
- Generalized Anxiety Disorder (25%)
- Specific Phobia (14%)
- OCD (10%)
- PTSD (7%)
- Dysthymia (5%)
- Panic Disorder (1-2%)

Comorbidities

• Attention problems have been hypothesized to be among the information processing deficits that underlie hoarding
• 30% of HD patients meet criteria for Inattentive ADHD
  • ADHD is significantly more frequent in HD than in OCD
ADHD and Hoarding Disorder

- HD (N = 39), nonhoarding OCD (N = 26), and healthy controls (N = 36) underwent:
  - standardized interview and self-report measures of the core features of Hoarding, OCD symptoms, negative affect, and ADHD symptoms.
- Inattentive (but not hyperactive/impulsive) symptoms of ADHD predicted severity of clutter, difficulty discarding, and acquiring
- No relationship between inattentive symptoms and non hoarding OCD

Tolin & Villavicencio (2011) Inattention, but not OCD Predicts Core Features of Hoarding Disorder, Behav Res Ther. February 1; 49(2): 120–125
Comorbid Personality Disorders

- OCD and HD samples have similar rates of personality disorders
- OCPD is most common (30%)
- Avoidant (8.8%)
- Borderline (5.4%)
- No gender differences
NEUROPHYSIOLOGY OF HOARDING
Neurophysiology

• Hoarding may stem from many overlapping processes:
  ➢ Information processing (deficits relating to decision making, categorization and organization)
  ➢ Emotional attachment to possessions
  ➢ Behavioral avoidance
Neuroimaging Studies

• Most have examined Hoarding in context OCD
  – Healthy Controls
  – OCD with hoarding features
  – OCD without hoarding

• PET scans (Resting State Studies)

• Functional MRI (Symptom Provocation Studies)
Resting State Study

- PET scans obtained for 45 OCD patients and 17 controls
  - 33 Non Hoarding, 12 Hoarding

- Hoarders had significantly *lower* glucose metabolism in anterior and posterior cingulate gyrus

• Functions of Posterior Cingulate Cortex
  – Monitors visual events
  – Spatial orientation
  – Processes emotional stimuli

• Functions of Anterior Cingulate Cortex
  – Motivation
  – Focused attention
  – Assigning emotional valence to stimuli
  – Detecting errors
  – Decision making (choosing between multiple options)
Symptom Provocation Study

• Study recruited patients with well defined Hoarding Disorder (43)
  – Compared OCD (31) and Healthy Controls (33)
• Used fMRI in real time to decide whether to keep or discard their own possessions and others’ possessions
  • Participants brought paper items from their home without sorting them first
  • Researchers had comparable paper items that did not belong to the participants

Symptom Provocation Study

• The HD group chose to discard significantly fewer personal possessions than did the OCD and HC groups.
• No group differences were found for the number of others’ possessions discarded.
• Asked to identify emotions associated with tasks
  – HD participants reported greater anxiety, indecisiveness, and sadness than did the other 2 groups.
  – The HD and OCD participants both reported greater “not just right” feelings during the task than did HCs.
Symptom Provocation Study

• In the Anterior Cingulate Cortex and left insular cortex, patients with Hoarding Disorder had:
  – greater activity when discarding their own possessions
  – a relative lack of fMRI signal when discarding others’ possessions
Symptom Provocation Study

• The Anterior Cingulate Cortex is commonly implicated in error monitoring under conditions of uncertainty
• The Mid/Anterior Insula regions are thought to be associated with interoception, perception of unpleasant feeling states, and emotion-driven decisions.
• Together, these regions are thought to be part of a functionally connected network used to identify the emotional significance of a stimulus and generate an emotional response
Treatment

• Most studies to date examined patients meeting criteria for OCD
• Early studies showed OCD hoarders were more treatment resistant than non-hoarding OCD

Pharmacotherapy

• Do HD patients respond as well as nonhoarding OCD patients to Paroxetine?

• 32 patients with HD, 47 non hoarding OCD patients were treated with Paroxetine (no CBT)

• Response: >35% decrease in Y-BOCS and at least “much improved” on CGI

• Hoarders responded equally as well to Paroxetine as did non hoarding OCD patients with nearly identical improvements in depression, anxiety and overall functioning

Pharmacotherapy

• Virtually no data exists on treatment of HD with non-SRI medications

• Glutamate modulators
  • Riluzole, Memantine

• Target information processing deficits
  • stimulants, Modafinil, cholinesterase inhibitors
CBT for Hoarding Disorder

• 46 patients randomly assigned to WL vs. CBT for 12 weeks
  – Education, case formulation, skills training for organization and problem solving, direct exposure to non acquiring and discarding

• Measures included:
  – Hoarding Rating Scale, Saving Inventory, clinical global improvement measures

CBT for Hoarding Disorder

• At session 26
  – 68% of patients were considered improved on therapist clinical global improvement ratings
  – 76% of patients rated themselves as improved

• 41% of completers were clinically significantly improved

Treatment

• Combination of pharmacotherapy and CBT is likely to be more effective than either treatment alone

• More research is needed on treatment specifically for Hoarding Disorder patients
Effects on Families

• Level of rejection from family members toward the person who hoards was comparable to patients with schizophrenia.

• Family-based Harm Reduction therapy
  – reliance on home visits
  – participation of family, client and clinician.
Conclusions

• The hallmark features of Hoarding Disorder include:
  – difficulty discarding
  – clutter of active living areas
  – usually excessive acquisition

• Hoarding can seen in medical conditions
• Many hoarders will present for care with comorbid mood/anxiety disorders
• Information processing deficits and attention problems are thought to underlie hoarding
• More research is needed to study Hoarding Disorder as a distinct patient population


• Tolin &Villavincenzio (2011) Inattention, but not OCD Predicts Core Features of Hoarding Disorder, Behav Res Ther. February 1; 49(2): 120–125


References

Questions?