

*Case Report in Psychiatry*

# Hoarding disorder, suicidality, and treatment modalities

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## Abstract

Hoarding Disorder is a syndrome marked by persistent difficulty in discarding items due to a perceived need to save the objects, regardless of value or worth. Consequently, a large number of items accumulate in residential spaces, which leads to significant distress with impaired social/occupational functioning. This diagnosis is commonly seen in association with depression and obsessive-compulsive disorder and has recently achieved recognition as a standalone diagnosis. Response to treatment among patients with hoarding disorder is variable, with some individuals experiencing associated suicidality. This case report details a 77-year-old female with a history of major depressive disorder, who was found to have hoarding symptoms at the time of hospital admission. The patient was provided with cognitive behavioral therapy and numerous psychotropic agents were added to the treatment plan. Over the course of 8-weeks of psychopharmacological management, the patient showed minimal improvement of symptomatology, with a PHQ-9 score change from 27 to 24. The purpose of this case report is to recognize the lack of sufficient evidence for appropriate pharmacologic and psychotherapeutic management for patients with hoarding disorder. Most of the scientific literature on the efficacy of pharmacotherapy in hoarding disorder was conducted in obsessive-compulsive disorder patients with a prominent hoarding component. Also, most of the studies analyzing the effectiveness of cognitive behavioral therapy in hoarding disorder demonstrated varying benefit. Moreover, our goal in this report is to increase the awareness of hoarding disorder as a potential cause of suicidality.

**Take-home message:** Currently, we do not have sufficient evidence for the effective management of hoarding disorder. Moreover, future studies are necessary to investigate a more direct relationship between this syndrome and suicidality.

**Keywords:** Hoarding disorder; Compulsive hoarding; Suicide; Pharmacotherapy; Cognitive behavioral therapy

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## INTRODUCTION

Hoarding disorder (HD), a syndrome recently introduced into the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) as a standalone diagnosis, is characterized by a constant struggle to discard items due to a perceived need to keep the objects, regardless of value or worth [Table 1] [1,2]. Consequently, this results in excessive accumulation of possessions which clutter residential spaces and makes for unsanitary living conditions. This is in contrast to that of adaptive saving and collection of items. While normative collecting behavior leads to an accumulation of objects in a systematic fashion, hoarding disorder leads to unrelated/marginally related items piling together in spaces which are designed for other purposes (e.g., tabletops, hallways) [1]. Due to worries of losing the stored items, subjects with HD experience clinically significant distress which impairs social, occupational, or other forms of functioning [1].

The prevalence of HD is estimated to be between 2% and 6%, with most individuals experiencing the onset of hoarding symptoms in late adolescence [3–5]. Unfortunately, this disorder has a chronic, progressive course and is associated with an increased risk of adverse effects with each passing decade [6,7]. Such complications include but are not limited to falls, home eviction, self-neglect, malnourishment, food contamination, medication mismanagement, and mortality [7]. Currently, we do not know the exact cause of this psychiatric condition, however studies suggest that there may be a familial component to the disorder and stressful or traumatic life events can exacerbate hoarding symptoms [4–7]. HD is commonly seen in association with other psychiatric conditions, with several studies reporting Major Depressive Disorder (MDD) and Obsessive-Compulsive Disorder (OCD) as the most frequent comorbidities [8–15]. In a recent study conducted by Frost et al., MDD was found in over 50% of patients with HD [8]. Likewise, clinical studies indicated that OCD was found in 18 – 40% of patients with HD [15,16], however can occur independently of HD in 60 – 80% of cases [6]. Understanding the epidemiological overlap between HD and OCD is important to recognize as the neurocognitive profile of each disorder and response to pharmacologic agents vary significantly [6,17]. For instance, while users with OCD report efficacious results with selective serotonin reuptake inhibitors (SSRIs) as first-line therapy, patients with HD often report poor responses to similar treatment [17,18], with some studies suggesting pharmacologic interventions failing greater than 50% of the time [19].

To complicate matters further, people with hoarding disorder display varying insight into the reality of their illness [6,18,20]. But most often, these individuals lack ego-dystonicity and exhibit poor insight into their hoarding-related problems [20]. Thus, these individuals exhibit significant distress, yet may not realize that this can be the cause of their underlying symptomatology. As a result of this, many individuals who fit the diagnostic criteria for HD may not seek medical attention for their functionally impairing symptoms which can lead to worse outcomes, notably suicide. And as is the case with our patient who presented to the hospital with HD and co-occurring psychiatric illness, suicidality was induced by her hoarding-related behavior. Herein, we report a case of hoarding disorder in an elderly female with MDD, suicidality, and poor response to psychotropic agents.

**Table 1.** Diagnostic criteria of Hoarding Disorder in the DSM-5.

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- A. Persistent difficulty discarding or parting with possessions, regardless of their actual value.
  - B. This difficulty is due to a perceived need to save the items and to the distress associated with discarding them.
  - C. The difficulty of discarding possessions results in the accumulation of possessions that congest and clutter active living areas and substantially compromise their intended use. If living areas are uncluttered, it is only because of the interventions of third parties (e.g., family members, cleaners, or the authorities).
  - D. The hoarding causes clinically significant distress or impairment in social, occupational, or other important areas of functioning (including maintaining a safe environment for oneself or others).
  - E. The hoarding is not attributable to another medical condition (e.g., brain injury, cerebrovascular disease, Prader-Willi syndrome).
  - F. The hoarding is not better explained by the symptoms of another mental disorder (e.g., obsessions in obsessive-compulsive disorder, decreased energy in major depressive disorder, delusions in schizophrenia or another psychotic disorder, cognitive defects in major neurocognitive disorder, restricted interests in autism spectrum disorder).

*Specify if:*

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. (Approximately 80 to 90 percent of individuals with hoarding disorder display this trait).

*Specify if:*

With good or fair insight: The individual recognizes that hoarding-related beliefs and behaviors (pertaining to difficulty discarding items, clutter, or excessive acquisition) are problematic.

With poor insight: The individual is mostly convinced that hoarding-related beliefs and behaviors (pertaining to difficulty discarding items, clutter, or excessive acquisition) are not problematic despite evidence to the contrary.

With absent insight/delusional beliefs: The individual is completely convinced that hoarding-related beliefs and behaviors (pertaining to difficulty discarding items, clutter, or excessive acquisition) are not problematic despite evidence to the contrary.

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## CASE REPORT

A 77-year-old female with a past psychiatric history of MDD presented to the hospital for suicidal ideation with a plan to cut her arms. For a duration of one week, she endorsed depressed mood, hopelessness, anhedonia, decreased appetite, and thoughts of wanting to harm herself. Prior to admission, she lived independently but described feelings of loneliness for the past several years. Of noteworthy importance, she mentioned hoarding numerous items in her living space and reported attempts at trying to discard objects, however was unsuccessful. She believes that this is the underlying cause of her suicidality, which prompted her to seek medical attention. Her medical history included MDD and coronary artery disease (CAD). Surgical history was significant for 14 electroconvulsive therapy (ECT) sessions. She was non-compliant with prescribed outpatient medications: Duloxetine 40 mg QD (once-daily), Sertraline 100 mg QD, Bupropion 300 mg QAM (every morning), and Buspirone 5 mg TID (three times a day). She reported two prior psychiatric hospitalizations for suicide attempts by overdose on prescribed medications and she denied prior substance use history. On psychiatric review of systems, she reported generalized anxiety but

denied symptoms of mania, post-traumatic stress disorder (PTSD), or obsessive-compulsive disorder.

On physical examination, the patient was alert and oriented to person, place, and time. She appeared disheveled with holes in garments, body odor, and poor dentition. Her behavior, attention, and speech were normal. Her mood was depressed with a constricted affect, scoring a 27 on the Patient Health Questionnaire-9 (PHQ-9). She confirmed active suicidal ideation during the interview with a plan to overdose on medication. Her thought process was linear, with no delusions, obsessions, or phobias elicited. Laboratory studies (Complete Blood Count, Comprehensive Metabolic Panel, Troponins, Thyroid-stimulating hormone, Vitamin B9, B12, Urinalysis) and vital signs were within normal limits. Computed tomography (CT) of the head showed age-related cerebral volume loss. Based on this patient's history of difficulty discarding personal items leading to a cluttered home environment and significant functional impairment, she was diagnosed with hoarding disorder. She was started on Venlafaxine extended-release 150 mg QD, Escitalopram 20 mg QD, and Mirtazapine 30 mg QHS (nightly). Motivational interviewing and supportive psychotherapy were provided and the patient was supplied with HD pamphlets.

## **DISCUSSION**

Prior to 2013, in the DSM-4, hoarding was classified as a diagnostic criterion for Obsessive-Compulsive Personality Disorder and extreme hoarding symptoms were considered a manifestation of OCD [21]. In the DSM-5, hoarding disorder gained recognition as its own diagnosis under the disorder class Obsessive-Compulsive and Related Disorders (OCRD), which also includes Body Dysmorphic Disorder, Excoriation Disorder, and Trichotillomania [1]. These conditions share certain features with OCD, which include excessive preoccupations and ritualistic behaviors, alongside shared biopsychological and psychopathological factors [22]. Despite these similarities, each disorder listed under the umbrella term OCRD has a unique clinical presentation and distinct affective/cognitive components which warrant acknowledgment for independent psychiatric diagnoses.

There is scarce evidence examining the relationship between suicide and individuals presenting with OCD and prominent hoarding symptoms [23–28]. And as we did not discern HD as a standalone diagnosis until recently, there are even fewer studies evaluating the risk of suicide in patients with HD without comorbid OCD [14,29]. From the data collected, we can see a putative positive association between hoarding behaviors, suicidal ideation, and lifetime suicide attempts [23,30]. In the meta-analysis conducted by Pellegrini et al. [23], the prevalence of current suicidal ideation in patients with HD was pooled at 18.4% (95% CI: 10.2 to 28.3), with a lifetime suicide attempt rate of 24.1% (95% CI: 12.8 to 37.6). These statistics are concerning, given that the suicide attempt rate is greater than suicidal ideation. This suggests that people with HD may try to attempt suicide without thinking of their actions or consequences. However, we must also consider that some of these research studies included subjects with OCD as the primary diagnosis [24–28]. Likewise, OCD and HD are frequently associated with mood disorders, most notably depression [8–15], which brings further variables into the equation. Thus, many questions remain unanswered when examining the correlation between hoarding disorder, psychiatric comorbidities, and suicidality. Future studies are necessary in order to establish a more direct relationship between the aforementioned variables.

In the case of our patient, she was unresponsive to psychotropic medications for MDD and HD. Numerous pharmacologic strategies were attempted, including SSRIs, serotonin-norepinephrine reuptake inhibitors (SNRIs), tetracyclic antidepressants, and anxiolytics. After 8

weeks of pharmacologic management, she was still scoring in the severe depression category, with a PHQ-9 score of 24. Moreover, ECT and cognitive behavioral therapy (CBT) provided minimal relief to her depressed mood, suicidal ideation, and hoarding symptoms. This case reminds us of the negative association between hoarding symptoms and response to treatments traditionally used for OCD [19]. As reported by this patient, she questioned the effectiveness of therapeutic modalities implemented due to a lack of response to current and prior treatments. As a result, like this patient, many patients with HD may become non-compliant with prescribed medications which can further perpetuate comorbid psychiatric conditions and risk of suicidality.

The scientific literature concerning the efficacy of pharmacotherapy in hoarding disorder is not well established, given that most of the studies were conducted in OCD patients with a hoarding component [18,19]. In a 2015 meta-analysis evaluating the treatment of pathological hoarding, Brakoulias and colleagues [31] demonstrated that response to pharmacotherapy (SSRIs, SNRIs) occurred in 37 – 76% of patients, thus supporting the use of serotonin reuptake inhibitors in HD. Having said that, this study has several limitations, most notably its inclusion of greater than 85% case series and open-label studies, with only one randomized controlled trial assessed [31]. When it comes to the treatment of hoarding symptoms, very few clinical studies were piloted on applications of other drug classes like atypical antipsychotics, however, the case reports analyzing such agents (e.g., quetiapine, risperidone) demonstrated marginal, if any benefit [32]. However, a case study on treatment of hoarding symptoms coupled with rapid cycling bipolar depression showed improvement with lamotrigine plus methylphenidate which may be worth exploring in future research [33].

As it stands, we do not have sufficient knowledge for the proper management of patients diagnosed with HD without obsessive-compulsive disorder. No double-blind placebo-controlled randomized clinical trials exist for pharmacological management of hoarding disorder, with the vast majority of emerging studies focusing on psychotherapeutic interventions of HD [34]. Additionally, it should be of concern that most of the studies analyzing the effectiveness of CBT in HD demonstrated variable benefit [35,36]. Individuals with more severe hoarding symptoms were challenging to treat, with high dropout rates and low motivation to participate [35]. More resistance was seen in HD patients with conventional psychotherapy techniques that generally demonstrate significant benefit in patients with OCD [36]. Therefore, it is imperative that future studies assess novel treatment strategies so that we can improve the quality of life in patients diagnosed with hoarding disorder.

## **CONCLUSION**

We describe a female in her 70s with MDD who presented to the hospital for suicidal ideation with a plan to cut her arms. The patient underwent a complete workup by the medicine team to rule out organic causes of depression and suicidality. The inpatient psychiatry team diagnosed the patient with Hoarding Disorder and tried numerous pharmacologic and psychotherapeutic strategies to alleviate her distress; however, she was provided with minimal relief of her depressed mood, hoarding symptoms, and suicidal ideation. As there is limited research pertaining to this newly recognized syndrome, we need to increase our awareness of Hoarding Disorder as a potential cause of suicidality and carry out further studies on therapeutic interventions. With the advancement of clinical trials, and through trial and error, we may be able to find more effective avenues for therapy in the future.

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