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Medical conditions in geriatric hoarding disorder patients

Catherine R. Ayers^{a,b,c,*}, Yasmeen Iqbal^a, and Katrina Strickland^a

^aResearch Service, VA San Diego Healthcare System, San Diego, USA

^bPsychology Service, VA San Diego Healthcare System, San Diego, USA

^cDepartment of Psychiatry, University of California, San Diego, USA

Abstract

Hoarding disorder (HD) in late life is associated with increased risk for fire, falling, poor sanitary conditions, disability, and health risks. However, research on the health status of individuals with HD is limited. Hoarding symptoms and the resulting clutter may exacerbate health conditions and lead to improper management of medical illnesses.

Objective—The purpose of this study is to characterize the health status of older adults with hoarding. The rates of medical conditions will be compared to a non-psychiatric peer group.

Method—72 older adults with HD and 25 age matched normal controls, completed a medical conditions checklist, symptom severity measures (i.e., UCLA Hoarding Severity Scale, UHSS; Saving Inventory-Revised, SI-R) and a measure capturing activities of daily living (activities of daily living-hoarding, ADL-H).

Results—Older adults with HD ($n = 72$) reported significantly more health conditions compared to their non-psychiatric peers ($n = 25$). Hoarding severity significantly predicted the total number of medical conditions. Further, the vast majority of HD patients reported at least one medical condition.

Conclusion—This is alarming given that hoarding patients utilized health services less than typical for older adults. Given the health status of older adults with HD, interventions should target the prevention and management of medical conditions.

Keywords

older adults; health status; compulsive hoarding

Introduction

Hoarding disorder (HD) is identified by persistent difficulty discarding or parting with possessions due to distress associated with discarding, urges to save, and/or difficulty making decisions about what to keep and what to discard (American Psychiatric Association [APA], in press). As a result, clutter accumulates and fills active living areas to prevent normal use of space. Consequently, these symptoms may cause significant distress or

*Corresponding author. cayers@ucsd.edu.

impairment and pose an environmental threat. Hoarding Disorder has been identified as a chronic psychiatric condition (e.g., Ayers, Saxena, Golshan, & Wetherell, 2010), but findings on the association between age and severity of symptoms is conflicting. One investigation found the rate of hoarding to be nearly three times as that prevalent among older adults (55–94) than younger adults (33–44) (Samuels et al., 2008). However, four other epidemiological studies have failed to find associations between hoarding severity and age (Bulli et al., 2013; Fullana et al., 2010; Mueller, Mitchell, Crosby, Glaesmer, & de Zwaan, 2009; Timpano et al., 2011a). It appears that the onset is typically in childhood and adolescence (Grisham, Frost, Steketee, Kim, & Hood, 2006) with persistent symptoms over subsequent decades with a stabilization at some point in adulthood (Ayers et al., 2010; Tolin, Meunier, Frost, & Steketee, 2010). Given the chronicity of this disorder as well as the evidence suggesting health problems in midlife samples (Tolin, Frost, Steketee, Gray, & Fitch, 2008), understanding the medical status of HD patients has important public health implications.

Findings on physical health outcomes suggest that individuals with HD may have greater susceptibility to develop medical-related problems. Tolin et al. (2008) reported that 63.6% of a large sample of middle-aged individuals with HD endorsed at least one chronic and severe medical condition, compared to 49.8% of participants not meeting HD criteria. Participants also reported an increased risk of chronic and severe medical conditions (e.g., ranging from ulcer to stroke) compared to a National Comorbidity Survey sample of women, which was used as the comparison group because of the predominance of women in the study's sample of HD participants (Tolin et al., 2008). Complaints of arthritis, hypertension, chronic stomach, and gall bladder problems, lupus/thyroid disorder, autoimmune disease, chronic fatigue syndrome, fibromyalgia, and diabetes were also found among midlife individuals with HD (Tolin et al., 2008). Further, participants in this study were nearly three times as likely to be overweight or obese compared to family informants. This obesity finding was supported by findings that hoarding severity is associated with greater body mass index (BMI) and increased obesity rates (Timpano, Schmidt, Wheaton, Wendland, & Murphy, 2011b). In an older adult HD sample, Ayers et al. (2010) identified a significant number of geriatric HD participants who reported diagnoses of hypertension (61%), sleep apnea (22%), seizures (11%), and stroke (11%). Finally, compared to non-psychiatric peers, older adults with HD report increased medical comorbidity and are more likely to endorse the risk of falling, catching fire, poor nutrition, poor hygiene, and medical problems (Diefenbach, DiMauro, Frost, Steketee, & Tolin, 2013).

Multiple reports have illustrated activities of daily living (ADL) impairment in older adults with HD (Ayers, Schiehser, Liu, & Wetherell, 2012; Diefenbach et al., 2013; Kim, Steketee, & Frost, 2001). When compared to non-psychiatric peers, older adults with HD ($n = 28$; aged 55 and over) have significantly more impairment in ADLs (Ayers et al., 2012). Further, hoarding severity is found to be significantly related to greater ADL impairment.

The directionality of the relationship between HD and medical conditions is not completely clear. The symptoms of HD may create susceptibility to medical illness. However, it is possible that HD patients with existing medical conditions score higher on severity measures. That is, older adults with HD may not be more prone to medical conditions, rather medical conditions may preclude these individuals from physically decluttering their homes,

inflating symptom severity scores. However, hoarding severity measures extensively explore urges to save and acquire items, as well as difficulty with the emotional and cognitive aspects of discarding, rather than physical limitations. Further, ADL scales focus on impairment only as a result of hoarding and clutter, asking patients to disregard other factors such as medical conditions. Increased incidence of medical conditions has been reported among geriatric patients in other psychiatric populations. For example, reports of high medical comorbidity have been shown in samples of older adults with generalised anxiety disorder (GAD; Richardson, Simning He, & Conwell, 2011) and depression (Proctor et al., 2003). Specifically, Richardson et al. (2011) found that anxious older adults were more likely to have five or greater medical conditions. Wetherell et al. (2010) reported higher rates of diabetes and gastrointestinal conditions in an older adult sample with GAD compared to community controls. Proctor et al. (2003) found that depressed older adults had a high rate of medical comorbidities, including hypertension, atherosclerosis, coronary artery disease, neurologic conditions, among others. Despite these findings, little research has examined the health status of older adults with HD. The purpose of this study is to characterize the health status of older adults with hoarding. The rates of medical conditions will be compared to a non-psychiatric peer group.

Methods

Older adults with HD ($n = 72$) and older adults without HD ($n = 25$) were recruited from 2008–2012 in the San Diego County through posted flyers and electronic advertisements. Flyers were posted in public venues, including senior centers, and specifically stated the purpose of the investigation. All participants completed an assessment with a licensed clinical psychologist or an advanced-level graduate student under the supervision of a licensed clinical psychologist and consented to Institutional Review Board approved study procedures. Those who elected to participate completed a medical conditions checklist that inquired about several common medical conditions. These conditions were then categorized into the following: cardiovascular conditions (e.g., hypertension, hyperlipidemia, heart disease, and stroke), arthritis, renal conditions (hepatitis and kidney disease), hematologic conditions (e.g., bleeding, anemia, blood cancer), lung conditions (tuberculosis, emphysema, and asthma), sleep apnea, head injury (e.g., head injury with or without loss of consciousness and concussion), cancer (all cancers), gastric conditions (colitis and ulcers), seizures, diabetes, and other medical conditions that could not be classified (e.g., migraines). Participants also completed the Saving Inventory-Revised (SI-R; Frost, Steketee, & Grisham, 2004) and the UCLA Hoarding Severity Scale (Saxena, Brody, Maidment, & Baxter, 2007) to assess hoarding severity as well as the activities of daily living-hoarding (ADL-H; Frost, Hristova, Steketee, & Tolin, in press) to determine functional abilities. The ADL-H differs from the standard ADL checklist in that it specifically assesses activities of daily living that may be impacted by hoarding (Frost, Hristova, Steketee, & Tolin, 2013). Activities of daily living that are compromised by hoarding are the ability to move/exit quickly, find important items, appropriate use of appliances, plumbing (both kitchen and bath), furniture, and rooms. Inclusion criteria were: age 60 or older, a diagnosis of HD based on DSM-V proposed criteria agreed upon by two licensed clinical psychologists, an SI-R score of 40 or greater, and a UHSS score of 20 or greater. Participants were excluded if they

scored a 24 or below on the Montreal Cognitive Assessment (MoCA; Nasreddine et al., 2005) or had a diagnosis of schizophrenia, substance use, bipolar disorder, or expressed suicidal ideation.

Data analysis

Descriptive statistics were obtained for all variables and data were examined for normality, missing values, and outliers. Independent samples t-tests were used to compare the hoarding and control groups on measures of hoarding (SI-R and UHSS) and functioning (ADL-H). Simple linear regression was conducted using the total number of medical conditions as a dependent variable and hoarding severity measures as the independent variable. Pearson correlations were used to determine the relationships between hoarding severity and the number of specific health conditions. All tests were two-sided and significance was defined as $p < .05$. All analyses were performed using SPSS version 18.0.

Results

Groups did not differ with respect to age, gender, or education (see Table 1). Almost all hoarding subjects (90%) and roughly half (44%) of the non-psychiatric comparison group reported at least one medical condition. Hoarding participants reported that their last primary care visit was approximately one and a half years ago (16.29 months). Older adults with HD ($M = 3.5$, $SD = 2.4$) reported significantly more medical conditions than the comparison group ($M = 2.2$, $SD = 1.8$); ($t = -2.94$, $p < .005$). Specifically, older adults with HD reported significantly more head injuries ($t = -4.50$, $p < .000$), arthritic conditions ($t = -2.61$, $p = .011$), diabetes ($t = -2.69$, $p = .009$), seizures ($t = -2.30$, $p = .004$), lung conditions ($t = -2.04$, $p = .045$), hematological conditions ($t = -2.97$, $p < .004$), and sleep apnea ($t = -5.41$, $p < .000$) compared to non-psychiatric peers. Not surprisingly, older adults with HD ($M = 32.2$, $SD = 12.0$) reported more functional impairment in everyday activities than did their non-psychiatric peers ($M = 13.8$, $SD = 5.52$); ($t = -9.59$, $p < .000$) on the ADL-H.

Significant associations were found between hoarding severity measures, total number of medical conditions, and several medical conditions. We found that the clinician delivered hoarding severity assessment (UHSS; $B = .12$, $p < .001$) and hoarding severity self-report (SI-R; $B = .071$, $p < .001$) were positively associated with the total number of medical conditions. Hoarding severity measures explained a significant proportion of variance in the number of medical conditions (UHSS; $R^2 = .14$, $F(1, 96) = 14.78$, $p < .001$; SI-R; $R^2 = .18$, $F(1, 96) = 20.01$, $p < .001$). We also found positive correlations between hoarding severity scores and specific medical conditions, such as sleep apnea (SI-R; $r = .317$, $p = .004$; UHSS; $r = .275$, $p = .011$), arthritic conditions (SI-R; $r = .273$, $p = .013$; UHSS; $r = .275$, $p = .011$), and hematologic conditions (SI-R; $r = .229$, $p = .039$; UHSS; $r = .261$, $p = .016$).

Discussion

Our findings indicate that older adults with HD experienced significantly more health conditions compared to a non-psychiatric comparison group. Further, hoarding severity is significantly associated with the number of medical conditions, specifically sleep apnea,

arthritic, and hematologic conditions. Overall, results suggest that those working with geriatric hoarding patients should not focus solely on mental health and include interventions for medical conditions in treatment planning.

An alarmingly high number of HD participants (90%) reported at least one medical condition compared to only 44% in the peer group. These results are consistent with the existing literature demonstrating the relatively high rates of medical illnesses compared to non-hoarding participants (Tolin et al., 2008). Notable findings in the present investigation showed similar rates of cardiovascular conditions (hypertension 61%; stroke 11%), sleep apnea (22%), and seizures (11%) as reported by Ayers et al. (2010). Our findings indicate that the level of hoarding severity is associated with the total number of health conditions of each patient. Thus, we can assume that those with severity hoarding symptoms have an increased risk for multiple medical comorbidities.

Specific medical conditions that were more common among hoarding participants include diabetes, seizures, head injury, sleep apnea, cardiovascular, arthritic, hematological, and lung conditions. For the individual with HD, these conditions provide great challenges in daily living and the ability to manage a cluttered home. For example, conditions such as sleep apnea, hematological, and cardiovascular problems can reduce physical capacity and motivation, potentially leading to further debilitation and increased clutter.

At the present time, the reason why the total number of health conditions reported by the hoarding sample exceeded those reported by their non-psychiatric peers is unknown. However, this population may be less likely to engage in regular physician visits and maintenance for chronic conditions, such as diabetes, sleep apnea, and cardiovascular problems, leading to progression in disease and medical comorbidity. In fact, our sample demonstrated a low level of health care access and utilization despite high levels of physical health problems. Those with HD visit their primary care physician once approximately every year and a half, which is a rate much less than average for adults over 65 years of age (7.4 per year; Schappert & Rechtsteiner, 2008). Furthermore, hoarding characteristics, such as poor insight, self-neglect, and cognitive difficulties may likely contribute to a lack of medical care. Thus, those with HD may be less able/willing to access necessary medical attention.

While this is the largest investigation to date of the medical status of geriatric HD participants, there are limitations. Medical conditions were not substantiated by a physician. Further, the sample size of the peer comparison group was significantly smaller than the HD group. This study did not investigate body mass index (BMI) and obesity, which may be primary health conditions that influence cardiovascular factors. Future work should explore health care utilization, medical compliance, and physical disability caused by HD in older adults. Additionally, the addition of BMI and descriptive medical features, such as chronicity and severity to determine the extent of medical disability would assist in the characterization of this group.

Those treating HD patients in medical or psychiatric settings should rely heavily on a multidisciplinary medical team as the impact of HD is not restricted to the psychiatric status.

Clinicians working with older adults with HD should ensure that their patients receive comprehensive health care by making appropriate referrals and targeting hoarding symptoms that serve as barriers to medical care. Ideally, healthcare providers should coordinate care to ensure that older adult patients with HD comply with their medication regimen and receive care for medical conditions. Given that many medical conditions can impact the ability to manage a cluttered home environment, it is important that clinicians assess physical capacity and provide patients with appropriate strategies to manage their physical health within the context of a cluttered environment.

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Table 1

Sample characteristics of 72 older adults with hoarding disorder and 25 same age peers.

	HD (<i>n</i> = 72)	NC (<i>n</i> = 25)
Group	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)
Age	66.1 (7.26)	66.7 (7.11)
Gender	43 F	9 F
	29 M	16 M
Ethnicity	Caucasian 89%	Caucasian 96%
	Hispanic 4%	African- American 4%
	African- American 3%	
	Others 4%	
Education	15.5 (2.10)	15.3 (2.23)
UCLA Hoarding Severity Scale	26.5 (6.60)	3.5 (3.24)
Saving Inventory- Revised	55.9 (12.5)	9.91 (7.19)
Activities of daily living-hoarding	32.2 (12.0)	13.8 (5.52)
Total number of health conditions	3.52 (2.42)	2.20 (1.78)
Cardiovascular conditions	61%	44%
Arthritic conditions	35%	12%
Renal conditions	3%	4%
Hematological conditions	10%	0%
Lung conditions	6%	0%
Sleep apnea	29%	0%
Head injury	20%	0%
Cancer	17%	20%
Gastric conditions	8%	8%
Seizures	6%	0%
Diabetes	21%	4%
Other conditions	46%	52%