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Treatment Recruitment and Retention of Geriatric Participants With Hoarding Disorder

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Abstract

This study describes the initial contact of 255 potential participants, recruitment of 63 participants, and retention of 57 participants from three geriatric Hoarding Disorder (HD) studies. Patients with HD were easily recruited from the community, primarily through the use of clinician referrals and posted flyers, as evidenced by steady patient flow despite lack of compensation for participation. Contrary to treatment outcomes of late life mood and anxiety disorders, geriatric HD patients are largely retained in clinical research treatment studies. Results demonstrate that older adults with HD can be engaged in treatment. Participants often needed the study staff to provide substantial support, including informal motivational interviewing and problem solving, in scheduling and attending the initial visit.

Keywords

hoarding disorder; older adults; recruitment and retention

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Hoarding Disorder (HD) is characterized by an inability to discard possessions regardless of the objects' value due to a desire to keep the items as well as to avoid the distress accompanying the act of discarding. This prevents the use of active living spaces due to excessive clutter and causes clinically significant distress or functional impairment (American Psychiatric Association, 2013). Hoarding has been associated with an increased risk for fire or falling in the home as well as increased medical problems in older adults (Ayers, Iqbal, & Strickland, 2014; Dong, Simon, Mosqueda, & Evans, 2011; Kim, Steketee, & Frost, 2001). Further, geriatric HD patients exhibit lower global functioning and increased impairment in activities of daily living than non-HD peers (Ayers, Schiehser, Liu, & Wetherell, 2012). Epidemiological research has suggested that the prevalence of DSM-5 hoarding disorder is approximately 1.5% of the general population (Nordsletten et al., 2013), and there is some evidence to suggest that clinically significant compulsive hoarding may increase with age (Samuels et al., 2008). However, there has been no large-scale investigation of the prevalence of HD in older adults. The course of HD appears chronic for 73.0% of adult with compulsive hoarding symptoms and increasing for another 21.2% (Tolin, Meunier, Frost, & Steketee, 2010). When left untreated older adults with HD can experience moderate to severe symptomatology (Ayers, Saxena, Golshan, & Wetherell, 2010).

Individuals with HD often resist treatment or seek intervention only as a result of family or community pressure (Frost, Steketee, & Williams, 2000). In a clinical case series examining mid-life and older adults with clinically significant hoarding symptoms, Christensen & Greist (2001) found that the participants demonstrated marked indecision, low motivation for change, passive resistance, and sought treatment only at the request of a significant other. Findings on the treatment-seeking patterns of older adults with HD are limited and inconsistent. Nonetheless, some evidence suggests that there are low rates of utilization of treatment services among geriatric HD samples. Kim and colleagues (2001) reported that most hoarding cases seen by providers (e.g., case managers, visiting nurses, and social workers) came to their attention through referral by another agency or complaints by neighbors, family members, or anonymous parties. Only 3% of the adults in the study were self-referred for treatment services (Kim, Steketee, & Frost, 2001).

Among HD individuals who do present for treatment, hoarding severity is often associated with premature dropout and poor treatment prognosis (Mataix-Cols, Marks, Greist, Kobak, & Baer, 2002; Christensen & Greist, 2001). Treatment studies utilizing midlife samples reveal inconsistent attendance (Tolin, Steketee, & Frost, 2007), early termination (Mataix-Cols, Marks, Greist, Kobak, & Baer, 2002), and poor compliance (Christensen & Greist, 2001) as potential factors contributing to decreased rates of treatment success. While research on the development of effective treatments is ongoing, there have been reports of several possible sources of interference with treatment completion, such as decreased motivation (Tolin, Steketee, & Frost, 2007), limited insight and resistance to change (Kim, Steketee, & Frost, 2001), and the sense that the hoarding symptoms are normal behavior (Christensen & Greist, 2001).

Further complicating treatment utilization and successful completion of intervention among older adults with psychiatric illness are structural and environmental barriers to treatment.

Older adults with HD may lack information about appropriate or available care for HD. Individual resources such as the ability to physically attend outpatient services or lack of transportation may be problematic. Further, many older adults do not have access to health providers in their communities (Wei, Sambamoorthi, Olfson, Walkup, & Crystal, 2005). Other obstacles to evidence-based treatment for geriatric HD may include the length of treatment (24 to 26 sessions), the necessity of home visits to facilitate exposure-based interventions, a lack of mental health clinicians trained in evidence-based techniques to treat HD, and limited patient funds (i.e., Koenig, Leiste, & Spano, 2012).

There have been few published studies of psychotherapeutic interventions for HD, and available attrition rates for individual hoarding treatment studies are variable (see Table 1). In a group treatment for compulsive hoarding, Steketee and colleagues (2000) reported an attrition rate of 14.3% after 15 sessions ($N = 7$); 50% of the participants who completed the group treatment also completed 14 sessions of individual treatment. Tolin and colleagues (2007) found 28.6% attrition after 26 sessions of CBT in a sample of 14 individuals. A study conducted by Steketee and colleagues (2010) showed a comparable attrition rate (21.7%) among adults with compulsive hoarding completing 26 sessions of individual CBT treatment. Finally, Turner and colleagues (2010) reported an attrition rate of 33.3% from their pilot study of 26 sessions of CBT for older adults with compulsive hoarding. Unfortunately, attrition rates for many treatment outcome studies are not available (e.g., Saxena, Brody, Maidment, & Baxter, 2007; Muroff et al., 2009). Reasons for early termination reported in these studies included poor homework compliance (Steketee, Frost, Wincze, Greene, & Douglass, 2000; Tolin, Steketee, & Frost, 2007), frequent cancellations and scheduling conflicts (Tolin, Steketee, & Frost, 2007; Steketee, Frost, Tolin, Rasmussen, & Brown, 2010), transportation difficulties (Steketee, Frost, Tolin, Rasmussen, & Brown, 2010), and dissatisfaction with progress or treatment (Steketee, Frost, Tolin, Rasmussen, & Brown, 2010; Tolin, Steketee, & Frost, 2007). Although the attrition rates reported above are not higher than those seen in other geriatric treatment studies for anxiety (e.g., Stanley et al., 2009; Wetherell & Gatz, 2001) and depression (Serfaty et al., 2009), we believe that increased use of informal therapeutic techniques, such as motivational interviewing and problem solving, can increase the retention of geriatric participants in treatment studies for HD.

With the recent inclusion of HD as a distinct disorder in the DSM-5, the recruitment and retention of service utilization for older adults with HD is an increasingly relevant issue. This article describes the recruitment methods used in a treatment outcome study of older adults diagnosed with HD. Retention rates of enrolled participants will also be reported and examined in relationship to hoarding severity and (other factors). Although the information presented is within the capacity of clinical research, findings can provide a source of guidance for both researchers and practitioners who treat individuals with HD.

METHODS

The data examined were collected from individuals who participated in three different geriatric HD treatment studies offered at the VA San Diego Healthcare System between July 2008 and July 2013. Participants were included if they were at least 60 years old, met

proposed DSM-5 criteria for HD based upon self-report and clinician-administered diagnostic measures and a consensus diagnosis supervised by a licensed clinical psychologist, had not received psychotherapy or changes in psychotropic medications for 3 months prior to enrollment, and demonstrated no deficits in cognitive ability (i.e., less than a score of 23) on the Montreal Cognitive Assessment (MoCA; Nasreddine et al., 2005). Presence of current substance abuse, history of mania or psychosis, and active suicidal ideation were exclusionary as measured by the Mini-International Neuropsychiatric Interview (M.I.N.I.; Sheehan et al., 1998) as a brief diagnostic.

Recruitment for all studies consisted of flyers distributed throughout the VA San Diego Healthcare System, the University of California San Diego, community and recreation centers, senior centers, and local interest groups (e.g., swap meets). Additional recruitment efforts included postings on craigslist (a free classified advertisement website), radio advertisements, referrals from family members, healthcare providers, and professionals working closely with hoarding individuals, and community based presentations.

Inclusion status was based on multiple contact points. When potential participants called to express interest in the study, they were provided with details regarding time commitment (e.g., length of study, number of frequency of sessions and follow-up assessments), randomization procedures (if applicable), treatment and control groups offered, and requirements of participation (i.e., refrain from starting/stopping/changing psychotropic medications and/or other psychotherapy services during participation on the study). Persons who met initial inclusion criteria and expressed interest were also administered the five-item Hoarding Rating Scale (HRS; Tolin, Frost, & Steketee, 2010) over the phone. If individuals indicated moderate to severe hoarding symptom severity on the majority of items (e.g., HRS score 4), they were scheduled for an in-office appointment.

During the in-person diagnostic interview, potential participants signed informed consent documents and completed diagnostic interviewing, cognitive assessments, and symptom severity measures with a licensed clinical psychologist or trained graduate level research assistant under the supervision of a licensed provider. The informed consent process included a more in-depth discussion of the length of the study, the number of treatment sessions, and the frequency of both session and assessments.

Individuals were also asked to complete a comprehensive packet of self-report measures (e.g., background information, symptom inventories, medical history, etc.).

Participants were enrolled in the study after examination of all screening materials by a licensed clinical psychologist. Participants were excluded if their hoarding symptoms were judged to be the result of another psychiatric or medical disorder, such as obsessive-compulsive disorder (OCD) or dementia. Individuals who also met criteria for OCD were further queried about the context of their hoarding symptoms (e.g., if the hoarding was due to a prototypical obsession or avoidance of other compulsions). Individuals who were excluded from the study were provided with referral sources. Based on the time period that the patients were assessed, they were enrolled to one of the following studies:

Study 1: Open label trial of cognitive behavioral therapy (CBT) for hoarding with older adults. Twelve participants completed 26 sessions of CBT for hoarding with a licensed clinical psychologist over 17 weeks (Ayers, Wetherell, Golshan, & Saxena, 2011). The treatment followed the CBT manual developed by Steketee and Frost (2007) and included motivational interviewing, problem solving, cognitive restructuring, and exposure to discarding. Approximately 25% of the sessions were conducted in the participant's home.

Study 2: Open trial of cognitive rehabilitation and exposure-sorting therapy (CREST) for older adults with HD. Eleven participants completed 24 sessions of CREST, including 6 weeks of cognitive rehabilitation followed by 16 weeks of exposure based therapy and 2 weeks of relapse prevention that followed a manualized protocol (Ayers, Saxena et al., 2014). The cognitive rehabilitation portion of treatment included sessions on using calendars and to-do lists, categorization skills, and cognitive flexibility. Approximately 12.5% to 25% of sessions were conducted in the home.

Study 3: Randomized controlled trial comparing CREST to case management. Forty participants were randomized to either 24 sessions of CREST or 24 sessions of case management. This study is currently in progress. Case management included supportive therapy and helping to find and enroll the participants in appropriate social services.

Participants were not compensated for either participation in studies or for transportation costs. Study therapists (i.e., licensed clinical psychologists and nurse care manager) maintained flexibility in their schedules to include evenings, weekends, and scheduled home visits as indicated by the treatment protocol for accommodation purposes.

Measures

The HRS was used to assess hoarding symptom severity during the initial phone screen. Hoarding severity during the in-person diagnostic interview was assessed using two self-report assessments, the Saving Inventory-Revised (SI-R; Frost, Steketee, & Grisham, 2004) and the Clutter Image Rating (CIR; Frost, Steketee, Tolin, & Renaud, 2008), as well as a clinician-administered assessment, the UCLA Hoarding Severity Scale (UHSS; Saxena et al., 2007). The CIR, a three item pictorial assessment of clutter in the home, was rated both by participants during the in-person diagnostic interview and, for 35 of the participants, by clinicians during the initial home visit. Clinician ratings of the CIR during the initial home visit were significantly correlated with participant ratings ($r = .54, p < .001$), and these results have been reported in a previous article (Dozier & Ayers, 2014).

RESULTS

Recruitment

Across the three studies, there have been 255 phone screens to date. Information on the referral source was collected during the initial phone contact. Inclusion criteria for all three studies were similar and there were no differences in the recruitment for each study. Individuals learned about the study from radio advertisements (1.55%), family members or friends (16.06%), therapists or physicians (35.23%), listings on craigslist (19.17%) or other online sources (7.25%), or from posted flyers (20.73%).

Of the 255 individuals who initially contacted study staff, 112 were ineligible based on the phone screen, 47 were eligible at screening but not interested in participating, and 25 were eligible at screening but not able to participate (see Figure 1). Reasons for participant exclusion at the initial phone contact included recent changes in medication, a history of psychosis or bipolar disorder, current involvement in psychotherapy, and aged younger than 60.

The average HRS score of all individuals who were screened was 5.47 ($SD = 1.4$; range 1.4–8.0) and the average age was 66.2 ($SD = 9.9$, range 31–87). We assessed differences in HRS scores and age among participants who were either enrolled or not enrolled for various reasons (e.g., not eligible at screening or diagnostic assessment, eligible but not interested, or eligible but not able to participate). Mean HRS scores for each enrollment status are displayed in Table 2. There were significant differences based on enrollment status ($F(3, 95) = 6.78, p < .001$). Follow-up t -tests using Bonferroni's correction revealed only two significant group differences: enrolled participants scored significantly higher than not eligible participants ($t(95) = 13.82, p < .001$); enrolled participants scored significantly higher than participants who were eligible but not interested ($t(95) = 9.35, p < .01$). There was no significant correlation between hoarding severity as measured by the HRS and the age of the individual screened ($r = -.059, p = .567$). There were no significant group differences in age based on enrollment status ($F(3, 122) = 1.22, p = .307$).

Scheduling conflicts and inability to reach participants were not uncommon. Our staff was in contact with potential participants approximately 3.45 times on average ($SD = 2.60$, range 1–15) before a successful appointment was scheduled. Study staff tracked the time of day during which participants were contacted in order to attempt to contact participants at varying times in order to maximize the chance of a successful contact. The number of calls made before a successful appointment was scheduled was unrelated to enrollment status, HRS severity, and age (all p values $> .05$). Research assistants also frequently utilized informal motivational interviewing (MI) and problem solving to aid individuals in navigating potential barriers to treatment.

Attrition

Of the 71 individuals scheduled for an in-person assessment, five did not meet study criteria (1.92%), three were eligible but declined to participate (1.15%), and 63 individuals were eligible and agreed to participate (86.30%). Of the 5 patients who did not meet study inclusion criteria, two were excluded for subclinical hoarding symptoms, two were excluded for active bipolar I disorder, and one was excluded for a low MoCA score. The majority of enrolled participants were female (see Table 1). Of the 63 enrolled participants, 38 individuals (60.32%) presented with at least one co-morbidity and 24 (38.10%) presented with no co-morbidities, as measured by the M.I.N.I., while one participant (1.59%) was not administered the M.I.N.I. Co-morbidities included MDD (44.44%), Dysthymia (22.22%), GAD (22.22%), Mania (4.76%), Hypomania (3.17%), Panic Disorder with Agoraphobia (1.59%), Agoraphobia (1.59%), Social Phobia (4.76%), OCD (36.51%), PTSD (6.35%), Mood Disorder NOS (3.17%), Alcohol Dependence (1.59%), and low-risk Suicidality (9.52%). Enrolled participants ($N = 63$) were mostly female (70%) and had an average age

of 67 ($SD = 7.00$). Almost a quarter of all participants (23.3%) reported being a veteran, and 25.4% reported being either the current or former spouse of a veteran.

Two individuals (3.17% of enrolled) were dropped from the study by the principal investigator due to noncompliance with study protocol (one for exhibiting disruptive behavior and another for receiving therapy for grief). Four individuals (6.35% of enrolled participants) dropped out of treatment. None of the six patients who dropped from the study were veterans; one of the patients who dropped from the study was the current spouse of a veteran. All four of the participants who chose to drop out of treatment were in the geriatric case management condition. Study staff and the nurse case managers made multiple attempts to re-engage these participants in treatment. All four independently reported their dissatisfaction with care management (i.e., “this isn’t helping me”; “I’m not getting any better”). Fifty-seven individuals completed all sessions of case management or one of the behavioral treatment interventions for HD (90.48% of enrolled participants).

Enrolled participants’ baseline assessment scores of HD symptoms were all in the moderate to severe range (see Table 3).

DISCUSSION

Utilizing the largest sample of geriatric HD patients to date, these results further confirm the feasibility of recruiting and retaining geriatric HD patients in behavioral treatment. While the HD population is often characterized as difficult to engage in intervention, these findings dispute this notion. Because our sample was mainly self-referred, our sample may not be representative of more treatment-resistant older adults with HD; however all patients in the described studies met DSM-5 criteria for HD and many patients displayed quite severe hoarding symptoms. Lack of access to empirically based treatment could be the result of a patient’s financial constraints or ignorance of available treatment options, but may also be due to the lack of empirically based interventions available in non-research settings.

Recruitment

The current study suggests that community dwelling older adults can be engaged in evidence-based treatment of HD. In order to attract this population, both for treatment outcome research and for community-based services, the use of multiple methods of advertisement may increase the efficacy of recruitment efforts. Successful engagement of geriatric HD patients may also be contingent on a treatment provider’s ability to troubleshoot obstacles to treatment, which may require multiple phone contacts.

Physician referral, followed by the distribution of flyers, appeared to be the most successful methods of recruitment. Affiliation with a large medical center combined with an effort to increase awareness of available treatment options may have bolstered recruitment in the current study. Independent practitioners who are interested in providing treatment for HD may benefit from providing healthcare providers in their community with education about the signs and symptoms of HD in geriatric patients.

Including the initial phone contact, the study staff contacted participants an average of 3.45 times before successful scheduling and completion of the diagnostic assessment, including contacting patients to reschedule after cancellation and no-shows at initial appointments. The number of calls necessary before successful completion varied widely: some participants required as many as 15 telephone contacts before they completed the initial diagnostic assessment. Participants were often disorganized and, while interested in participation, needed the study staff to provide substantial support in scheduling and attending the initial visit. Such problems may be due to the inherent pathology of hoarding disorder, which has been linked to disorganization and difficulty with decision-making (Tolin, Kiehl, Worhunsky, Book, & Maltby, 2008). However, the number of calls made before successful schedule of an appointment was not related to hoarding symptoms severity in the current study. In any case, multiple attempts to contact and to schedule may be expected when working with this patient population and should not be assumed to indicate low motivation for treatment (Drieschner, Lammers, & van der Staak, 2004).

While such a degree of added support may not be practical in a non-research setting, these results suggest that geriatric HD patients may require additional problem solving on the part of the clinician in order to be engaged in treatment. Reducing the length of time between initial call and appointment, in addition to addressing potential difficulties with making the appointment (e.g., transportation problems, unclear driving instructions, and inconvenient time or day of appointment), could decrease scheduling conflicts and increase engagement in treatment.

The significant differences between the HRS scores among enrolled versus not enrolled participants could partially be explained by several different clinical issues associated with HD. Prior research suggests that individuals with HD may have poor insight about the personal consequences of their symptoms (Bloch, Landeros-Weisenberger, Rosario, Pittenger, & Leckman, 2008). Participants who called but elected not to enroll may have had lower scores on the HRS due to poor insight, which could have led to an under-reporting of hoarding symptoms. Alternatively, individuals who chose to participate may have been more interested due to the increased severity of their symptoms.

The number of calls received suggests that many individuals with HD are actively seeking treatment. Approximately 20% of callers were not interested in participating after initial inquiry, possibly due to avoidance, ambivalence, or lack of insight regarding the need for treatment. Several of these individuals indicated that they were not interested after learning that they would not be compensated, and many simply refused or did not return calls. Future studies may benefit from a more thorough recording of the conversations during the phone screens, which could provide valuable qualitative data about the characterization of individuals with possible HD who do and do not seek treatment, and the possible reasons why individuals may choose to not seek treatment.

Attrition

Our attrition rates are low for behavioral interventions in late life psychiatric samples. Behavioral treatment outcome studies for older adults with generalized anxiety disorder (GAD) report attrition rates from ranging from 25.3% (Stanley et al., 2009) to 34.7%

(Wetherell & Gatz, 2001) and geriatric depression rates as low as 18.1% (Serfaty et al., 2009). Among those individuals who were enrolled in this report, only four participants (6.35%) terminated treatment prematurely, suggesting that, once properly engaged, individuals suffering from HD strongly desire to remain in treatment. In addition, all four participants in the present sample who withdrew early were completing sessions in care management and were therefore not engaged in active behavioral treatment for hoarding. Most other geriatric hoarding interventions are reported as case studies (Cermele, Melendez-Pallitto, & Pandina, 2001; Franks, Lund, Poulton, & Caserta, 2004; Pogosian, 2010), limiting the comparability of attrition rates. The only other reported attrition rates for a study of late life hoarding is by Turner and colleagues (2010), who reported high attrition (33.3%) in a small sample ($N = 9$) of older adults. In contrast to the current study, Turner and colleagues did not utilize any outpatient visits and solely treated patients in the home. The higher attrition in the case management condition of the current study may be due to the lack of an active behavioral intervention. This is the first investigation of psychotherapeutic interventions for HD in San Diego. Regional differences in the sample utilized in the current study may have also affected the attrition of participants when compared with previous studies.

A potential explanation for the low attrition rate witnessed in the current study is the heavy use of MI in the first session of the CREST intervention. Therapist and patient discuss at length the consequences of hoarding behaviors, advantages and disadvantages to beginning treatment, potential obstacles in fully engaging in treatment, and whether this type of treatment is right for them. Informal MI was also utilized by research assistants when communicating with participants over the phone, in order to help individuals decide whether they felt that participation in the study would benefit them. Although MI is commonly used in interventions for geriatric anxiety and depression, there is little evidence of its use in other interventions for late life HD.

Limitations

Limitations of this project include poor ethnic minority recruitment and an inability to closely examine non-treatment-seeking community dwelling seniors with HD. In addition, the results discussed here were derived from a research study and these findings may not effectively generalize to other clinical contexts. Finally, the sample may have been self-selecting. Participants were informed of the length of the study both during the initial phone contact and during the informed consent process, and it is possible that individuals who were more likely to drop out of the study declined participation during the initial screening or diagnostic assessment.

Conclusions

The feasibility of engaging and retaining older adults with HD in a relatively lengthy treatment was effectively demonstrated. With the recent addition of HD to the DSM-5, agencies and mental health providers must be prepared to provide evidenced-based treatments for this vulnerable group, which may require additional measures to recruit and engage in treatment.

The findings suggest that it may be useful for clinicians outside of a research setting to use multiple strategies in attracting and engaging individuals seeking evidence-based treatment for HD. Clinicians may need to have a greater degree of commitment up front to help encourage older adults with HD to participate in therapy. Multiple follow-ups, assisting with problem solving around ideographic treatment barriers (transportation, feasibility, funds, etc.), and frequent contact may be necessary ingredients to foster treatment engagement in geriatric HD participants in both research and clinical settings. Clinicians should also consider utilizing more visual measures, such as the CIR. Visual manifestations of symptoms have been found to increase the ratability of items for both patients and informants (McDade-Montex, Watson, O' Hara, & Denburg, (2008).

Future studies may want to investigate the use of referrals from primary care physicians, and the integration of mental health services for HD with basic medical care. Primary care physicians may be able to aid in both the identification of possible HD patients and the retention of study participants by utilizing their existing relationship with the individual. As with many mental health disorders, it is important for medical etiologies to be ruled out before making a definitive diagnosis. Both researchers and clinicians in the community may want to work closely with medical professionals to aid ruling out and differential diagnosis when working with the geriatric HD population.

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FIGURE 1.
Flow of participants through each phase of the study.

TABLE 1

Attrition Rates for Individual Hoarding Treatment Interventions

Study	Screened	Enrolled	Mean Age (SD)	Male	Female	Attrition Rate ^a	Recruitment Methods	Conditions	CBT Format
Present Findings	255	63	67 (6.95)	30%	70%	9.5%	Flyers, radio, referrals, Internet postings, community presentations	CBT, CREST, Case management	Individual
Steketee et al., 2000	—	7	50 (7)	71%	29%	14.3% ^b	N/A	CBT	Individual and group
Tolin et al., 2007	41	14	49 (15)	0%	100%	28.6%	Media appearances, Internet postings	CBT	Individual
Steketee et al., 2010	118	46	54 (8.2)	25%	75%	21.7%	Referrals, media appearances	CBT	Individual
Turner et al., 2010	14	9	72.3 ^c	16%	84%	33.3%	Referrals	CBT	Individual

^a Attrition rate defined as percentage of participants completing post treatment assessments.

^b Attrition rate for 15 group sessions; 50% of participants completed an additional 14 individual sessions.

^c Demographic information only reported for treatment completers.

TABLE 2**HRS Scores by Enrollment Status**

Status	Mean (SD)	Min	Max
Enrolled	5.90 (1.08)	3.6	8
Not eligible	4.33 (2.07)	1.4	7.6
Eligible, not interested	4.73 (1.14)	2.6	6.4
Eligible, not able to participate	5.25 (1.51)	2.4	7.4

SD = Standard deviation.

TABLE 3 Hoarding Symptom Severity in Older Adults ($N = 63$) with HD Enrolled in Treatment Outcome Studies

	Mean (SD)	Min	Max
SI-R			
Total	55.3 (11.7)	31	78
Difficulty discarding	18.4 (4.0)	9	26
Acquisition	13.4 (4.5)	1	21
Clutter	23.5 (6.4)	11	36
UHSS	27.4 (5.4)	18	38
CIR	3.8 (.61)	1.1	4.1

SI-R = Saving Inventory–Revised; UHSS = UCLA Hoarding Severity Scale; CIR = Clutter Image Rating.