Age-Specific Prevalence of Hoarding and Obsessive Compulsive Disorder: A Population-Based Study

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Objective: Little is known about the age-specific prevalence of hoarding and obsessive compulsive symptoms (OCS), particularly in older age groups. The objectives of this study were to estimate the age-specific prevalence, severity, and relationships between hoarding and OCS in males and females using a large population-based sample.

Methods: We assessed the age-specific prevalence rates of hoarding disorder (HD) and OCD disorder (OCD) in males and females (at various age ranges between 15 and 97 years) from the Netherlands Twins Register (N = 15,194). Provisional HD and OCD diagnoses were made according to Diagnostic and Statistical Manual of Mental Health Disorders, 5th Edition, criteria using self-report measures. We also assessed hoarding and OCS severity in the various age groups and explored specific hoarding and OCS patterns (e.g., difficulty discarding, excessive acquisition, clutter, checking, washing, perfectionism, and obsessions) with age.

Results: Prevalence of provisional HD diagnoses (2.12%) increased linearly by 20% with every 5 years of age (z = 13.8, \( p < 0.0001 \)) and did not differ between males and females. Provisional OCD diagnoses were most common in younger individuals and in individuals over age 65. Co-occurring OCD increased hoarding symptom severity (coefficient: 4.5; SE: 0.2; 95% CI: 4.1–4.9; \( t = 22.0, p < 0.0001 \)). Difficulty discarding for HD and checking behaviors for OCD appeared to drive most increases in these diagnoses in older ages.

Conclusion: Increased prevalence and severity of HD with age appears to be primarily driven by difficulties with discarding. Increases in OCD prevalence with older age were unexpected and of potential clinical relevance. (Am J Geriatr Psychiatry 2016; ■■:■■–■■)

Key Words: Hoarding disorder, obsessive compulsive disorder, discarding, prevalence, age

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INTRODUCTION

Pathologic hoarding is defined as the acquisition of and persistent difficulty in parting with possessions, leading to excessive clutter, distress, and functional impairment. Pathologic hoarding occurs both independently and in conjunction with many neuropsychiatric disorders, including dementia, schizophrenia, obsessive compulsive disorder (OCD), and autism. Until recently, hoarding was typically classified as a symptom of either OCD or OC personality disorder.\(^1\) In 2013 the Diagnostic and Statistical Manual of Mental Health Disorders, 5th Edition (DSM-5), named hoarding disorder (HD) as a distinct clinical syndrome within the OCD and related disorders category.\(^2\) This change was informed by over a decade of accelerated research efforts examining pathologic hoarding behaviors, indicating that hoarding behavior is only present in about 20% of individuals with clinically significant OC symptoms (OCS) and that, conversely, around 83% of individuals with clinically significant hoarding symptoms do not present with clinically significant OCS.\(^3,5–8\) These data suggest that individuals with OCD and hoarding may represent only a fraction of the total population suffering from HD.\(^1\)

Although HD appears to be a chronic progressive disorder, little is known about its course and prevalence across the lifespan.\(^9\) Expert consensus reports a population prevalence of HD between 2% and 6%\(^,4,10–12\) The wide range of published prevalence estimates (1.5%–14%)\(^5,13–21\) and the typically lower reported prevalence in studies of children and adolescents\(^17,22\) underscore the need for additional work on the course of HD with aging. Previous retrospective studies suggest that hoarding symptoms begin during childhood and adolescence\(^9,23\) and increase in severity throughout life. Up to 70% of adults who hoard report that their symptoms began before age 20, with a mean onset at age 12.\(^11,24\) In populations over age 55, the prevalence of clinically impairing hoarding is over 6%, significantly higher than the general population prevalence (estimated at 2%–4%).\(^25\) In clinical samples, hoarding severity increases with age, supporting the hypothesis that increased HD prevalence in older populations may be due to a progression of symptoms across the lifespan.\(^9,26–28\) In fact, in older adults, HD is often conceptualized as a form of self-neglect or even elder self-abuse, speaking to the clear impairment that hoarding behaviors cause among older adults.\(^30,31\) Prolonged delay (at least a decade) often occurs between the onset of symptoms and the recognition of hoarding as a problem, complicating efforts to characterize the course of HD over the lifespan.\(^9\)

Although pathologic hoarding affects both sexes, epidemiologic studies vary in findings on the prevalence of sex differences.\(^10–12,17\) Some studies have found increased rates of hoarding among males,\(^5,11,12,20\) whereas others report higher rates among females\(^17\) or no sex differences.\(^7,10\) This variability may be partly the result of whether the study sample was clinical or epidemiologic in nature, because females are more likely to present for clinical care. Moreover, until recently, most studies encompassed individuals with OCD as the primary diagnoses and hoarding as a secondary symptom, and only recently have prevalence rates of HD across sexes have been studied.

In OCD, most longitudinal studies have reported on clinical cohorts,\(^32–35\) although one population-based longitudinal cohort study has been performed in adults,\(^36\) with follow-up periods ranging between 3 and 40 years. Some of these studies suggest that OCD has a relatively stable and chronic course, whereas others report more favorable outcomes with age.\(^32–35\) However, it should be noted that age at follow-up did not exceed 60 years (with the exception of the naturalistic follow-up study by Skoog and Skoog).\(^32\) Only one large-scale epidemiologic study examining OCD prevalence in individuals over age 60 has been conducted to date, to the best of our knowledge.\(^37\) This study showed lower rates of OCD and OCS among individuals age 65 and older compared with younger individuals but has not yet been replicated. Previous studies in the Netherland Twin Register have found equally distributed clinically significant OCS among males and females,\(^5,6\) and the DSM-5 also notes no sex differences in OCD prevalence rates, although age at onset can differ by sex.\(^3\) However, as with HD, few studies examine the prevalence of OCD in older ages and potential differences in prevalence in the older age groups in males and females. Thus, one aim of the current study is to replicate and extend previous cohort studies with data on OCS in old age groups.

There is evidence, despite the separation of HD into a distinct disorder from OCD, of an etiologic overlap between HD and OCD, with genetic correlations.