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Sexual obsessions and clinical correlates in adults with obsessive-compulsive disorder

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Abstract

Because little is known about sexual obsessions in individuals with obsessive-compulsive disorder (OCD), we examined rates and clinical correlates of sexual obsessions in 293 consecutive subjects with primary lifetime *Diagnostic and Statistical Manual of Mental Disorders*, *Fourth Edition*, OCD (54.6% females; mean age, 40.5 ± 12.9 years). Symptom severity was examined using the Yale-Brown Obsessive Compulsive Scale. Comorbidity, treatment response, insight, depression symptoms, quality of life, and social functioning were also assessed. All variables were compared in subjects who have OCD with and without sexual obsessions. Of the 293 subjects with primary OCD, 73 (24.9%) reported a history of sexual obsessions, and 39 (13.3%) of the subjects with OCD reported current sexual obsessions. Women were as likely as men to report sexual obsessions. As compared to those without these symptoms, subjects with current sexual obsessions were significantly more likely to report current aggressive (P < .001) and religious (P = .001) obsessions. Subjects with sexual obsessions also reported an earlier age of onset of OCD than subjects without these symptoms. Severity of OCD, comorbidity, treatment response, insight, depressive symptoms, quality of life, and social functioning did not differ between those with and without sexual obsessions. These preliminary results suggest that sexual obsessions are fairly common among individuals with OCD and may be associated with important clinical characteristics.

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1. Introduction

Obsessive-compulsive disorder (OCD) is a disabling disorder characterized by intrusive thoughts and/or repetitive behaviors. Although contamination obsessions are the most frequently reported [1], the obsessions of OCD may instead focus on various sexual themes: unwanted sexual thoughts about friends, family, or children; thoughts of violent sexual behavior; obsessions of engaging in homosexual activity; and thoughts of sex with animals [2]. Based on clinical impressions, patients tend to be highly reluctant to discuss these symptoms and may be less likely to disclose them to clinicians. Consequently, rates of sexual obsessions among subjects with OCD have ranged from 6% [3] to 24% [1]. Although data are limited, sexual obsessions are thought

to be more common in men with OCD [4,5], in subjects

Although mentioned in the OCD literature for years, relatively few studies have examined the prevalence and clinical correlates of sexual obsessions in subjects with OCD. Those studies that have examined sexual obsessions have largely done so in the context of predicting treatment response [9,10,12], understanding possible OCD subtypes [13,14], or as an ancillary aspect to comorbidity or gender issues [4-6]. The goal of this study was to assess how subjects with primary OCD and sexual obsessions differed from subjects who have OCD without sexual obsessions on a number of clinical variables. Unlike previous studies of sexual obsessions that limited their examination to comorbidity and OCD symptom severity [4,5,9,10,14-16], this study examined a broader range of clinical domains, including comorbidity, symptom severity, insight, quality of life, and social and occupational functioning.

with OCD who have bipolar disorder and tic disorders [6-8], and are associated with poorer insight and treatment response [9,10]. When present, sexual obsessions appear to interfere with sexual satisfaction [11].

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This work was performed at the Butler Hospital and the Department of Psychiatry and Human Behavior, Brown Medical School, Providence, RI.

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2. Methods

2.1. Subjects

Individuals who met lifetime Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) criteria for OCD agreed to participate in an ongoing prospective study of the course of OCD [15]. Study inclusion criteria were (1) primary diagnosis of DSM-IV OCD lifetime; (2) 19 years or older; and (3) able to be interviewed in person. The only exclusion criterion was the presence of an organic mental disorder or inability to understand and consent to the study. The investigation was carried out in accordance with the latest version of the Declaration of Helsinki. The Institutional Review Board of Butler Hospital approved the study and the consent statement. All study participants provided voluntary written informed consent. Participants were recruited from psychiatric treatment settings, including consecutive admissions to an outpatient OCD specialty clinic, inpatient units of a private psychiatric hospital, community mental health centers, general outpatient psychiatric clinics, and private practices in cognitive-behavioral therapy for OCD.

2.2. Assessments

Trained research assistants evaluated each subject and prepared narrative summaries of psychiatric symptoms. Raters assessed each subject using the Structured Clinical Interview for *DSM-IV* Axis I Disorders—Patient Version [16]. Before data entry, senior staff members reviewed interview data for clinical and clerical accuracy.

Obsessive-compulsive disorder symptom severity was assessed by the Yale-Brown Obsessive Compulsive Scale (YBOCS) [17,18]. The YBOCS is a reliable and valid, clinician-administered 10-item scale that assesses severity of obsessions and compulsions. Higher scores on the YBOCS indicate greater severity, with total scores ranging from 0 to 40 and scores for the obsessions and compulsions subscales each ranging from 0 to 20. Before the YBOCS, raters administered the YBOCS Symptom Checklist (YBOCS-SC) to gather information on specific current symptoms. The YBOCS-SC is composed of 13 separate categories (excluding miscellaneous) of obsessions and compulsions. (Because the aggressive obsession category contains items that refer to a fear of aggressive impulses [eg, "I have violent or horrific images in my mind"] and pathologic doubt [eg, "I fear that I'll harm others because I'm not careful enough"], we present this category as two subcategories: aggressive obsessions and pathologic doubt.)

The patient version of the Clinical Global Improvement scale [19] was used to assess each subject's impressions of response to medications as well as to cognitive behavioral therapy (CBT). Subjects were asked to indicate the degree that their previous treatments had improved their OCD symptoms using a 7-point scale ranging from very much improved to very much worse. The patient version of the Clinical Global Improvement scale is widely used and has

been demonstrated to be a sensitive measure of perceptions of improvement during treatment. For the purposes of this study, response was defined as "very much or much improved" as a result of a previous medication or CBT trial.

Insight was assessed using the Brown Assessment of Beliefs Scale (BABS), a reliable and valid 7-item semi-structured rater-administered scale that assesses delusionality during the past week [20]. Items are conviction, perception of others' views, explanation of differing views, fixity, attempt to disprove beliefs, insight (recognition that the belief has a psychiatric etiology), and ideas/delusions of reference. The total scores range from 0 to 24, with higher scores reflecting more delusional beliefs.

Current depressive symptoms were assessed using the 17-item Hamilton Rating Scale for Depression (HAM-D) [21]. Currents social functioning was assessed with the total score of the Social Adjustment Scale (SAS), a reliable, valid, and widely used 54-item self-report scale [22]. Current quality of life was assessed with the Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q), a reliable and valid self-report measure [23]. The first 14 items of the Q-LES-Q General Activities subscale were used to yield a total quality of life score, with lower scores reflecting less life satisfaction and enjoyment.

2.3. Data analysis

The percentages of subjects who had current and lifetime sexual obsessions were determined. Subjects who have OCD with current sexual obsessions were compared with subjects who have OCD without sexual obsessions on demographic and clinical variables. Between-group differences were tested using either Pearson χ^2 test or t test. All missing data were excluded on a pairwise basis for analysis. Because we performed multiple comparisons, we used an adjusted α level of P < .01; we did not adjust the α level to reflect all statistical comparisons because this is the first study of this topic and is therefore exploratory; in addition, the Bonferroni correction tends to be overly conservative [24].

3. Results

A total of 293 adults (160 [54.6%] females; mean age, 40.5 ± 12.9 years [range, 19-75] years) with *DSM-IV* OCD participated in the study. Most subjects were white, non-Hispanic (n = 286; 97.6%). One hundred five (35.8%) subjects were single, 128 (43.7%) were married, and 50 (17.0%) were divorced, separated, or widowed. One hundred thirty-five (46.1%) were college graduates.

At intake, the mean duration of OCD was 22.0 \pm 13.3 years (range, 0.2-69.0 years). Eighty (27.3%) subjects were unable to work because of psychopathology and 40 (13.7%) were receiving disability benefits largely because of OCD. Of the entire sample, 81.2% (n = 238) currently met full *DSM-IV* criteria for OCD. Those remaining had met full OCD criteria in the past; 17.1%

(n = 50) were currently in partial remission (symptoms consume less than 1 h/d; mild distress and/or functional impairment), and 1.7% (n = 5) were currently in full remission (no distress or functional impairment). At the time of the baseline interview, 91.5% of the sample was participating in outpatient treatment, 3.8% was inpatient, and 4.8% was not in treatment.

Of the 293 subjects with OCD, 73 (24.9%) reported a history of sexual obsessions and 39 (13.3%) of the subjects with OCD reported current sexual obsessions. Subjects who have OCD with sexual obsessions did not significantly

differ from those without sexual obsessions on any demographic features (Table 1).

Subjects with sexual obsessions reported a statistically significant earlier age of OCD onset (15.1 \pm 5.6 years) compared with subjects without sexual obsessions (19.0 \pm 10.3 years) ($t_{84.3} = 3.489$ [because of unequal variances]; P = .001). Subjects with sexual obsessions also reported a significantly earlier age of first treatment for OCD (24.5 \pm 10.1 compared with 30.3 \pm 12.0 years; $t_{261} = 2.776$; P = .006). Subjects with sexual obsessions reported a mean of 14.6 \pm 11.4 years in treatment for OCD, whereas subjects

Table 1
Demographics and clinical characteristics of subjects who have OCD with and without current sexual obsessions

	OCD without sexual obsessions ($n = 254$)	OCD with sexual obsessions $(n = 39)$	Statistic	df	P
Mean age (±SD), y	40.8 (12.9)	38.2 (12.2)	1.192 ^a	291	.234
Sex, n (%)	` /				
Female	139 (54.7)	21 (53.8)	0.011 ^b	1	.918
Marital status, n (%)	,	,	10.439 ^b	6	.107
Single	86 (33.9)	19 (48.7)			
Married	114 (44.9)	14 (35.9)			
Widow/separated/divorced	44 (17.3)	6 (15.4)			
Living with partner	10 (3.9)	0 (0)			
Education, n (%)	, ,	,	6.141 ^b	3	.105
High school graduate or less	52 (20.5)	12 (30.8)			
Part college	82 (32.3)	12 (30.8)			
College graduate	61 (24.0)	12 (30.8)			
Postcollege education	59 (23.2)	3 (7.7)			
Disability due to OCD, n (%)	32 (12.6)	8 (20.5)	1.796 ^b	1	.180
Comorbid lifetime disorders, n (%)					
Any mood disorder	185 (72.8)	32 (82.1)	1.495 ^b	1	.221
Any psychotic disorder	5 (2.0)	3 (7.7)	4.171 ^b	1	.041
Any anxiety disorder (not OCD)	140 (55.1)	20 (51.3)	0.201 ^b	1	.654
Any substance use disorder	65 (25.6)	10 (25.6)	$0.000^{\rm b}$	1	.995
Any tic disorder	15 (5.9)	4 (10.3)	1.005 ^b	1	.304
Any eating disorder	23 (9.1)	7 (17.9)	2.910 ^b	1	.088
Any somatoform disorder	20 (7.9)	2 (5.1)	0.367 ^b	1	.545
Any impulse control disorder	35 (13.8)	10 (25.6)	3.659 ^b	1	.056
YBOCS total score, mean (±SD)	20.1 (8.4)	21.5 (8.4)	-0.959^{a}	291	.339
YBOCS obsession score, mean (±SD)	9.8 (4.3)	10.7 (3.9)	-1.251 ^a	291	.212
YBOCS compulsion score, mean (±SD)	10.3 (4.6)	10.8 (4.7)	-0.603^{a}	291	.547
YBOCS-SC obsession categories, n (%)	()	()			
Aggressive	103 (40.4)	30 (76.9)	18.222 ^b	1	<.001
Pathologic doubt	138 (54.1)	27 (69.2)	3.138 ^b	1	.077
Contamination	145 (56.9)	24 (61.5)	0.303 ^b	1	.582
Hoarding	73 (28.6)	13 (33.3)	0.362 ^b	1	.547
Religious	58 (22.7)	19 (48.7)	11.804 ^b	1	.001
Symmetry	119 (46.7)	21 (53.8)	0.699 ^b	1	.403
Somatic	68 (26.7)	10 (25.6)	0.018 ^b	1	.893
YBOCS-SC compulsion categories, n (%)	00 (2017)	10 (20.0)	0.010	-	.0,2
Cleaning	155 (60.8)	21 (53.8)	0.678 ^b	1	.410
Checking	173 (67.8)	29 (74.4)	0.668 ^b	1	.414
Repeating	143 (56.1)	23 (59.0)	0.115 ^b	1	.734
Counting	64 (25.1)	12 (30.8)	0.568 ^b	1	.451
Ordering	107 (42.0)	20 (51.3)	1.198 ^b	1	.274
Hoarding	70 (27.5)	13 (33.3)	0.578 ^b	1	.447
17-Item HAM-D total score, mean (± SD)	9.5 (8.2)	12.8 (9.5)	-2.060^{a}	241	.041
BABS total score, mean $(\pm SD)$	6.3 (4.8)	6.9 (6.0)	-0.651^{a}	272	.516
SAS total score, mean (± SD)	2.1 (0.5)	2.3 (0.6)	-1.732^{a}	273	.086
Q-LES-Q total score, mean (±SD)	61.1 (17.8)	59.5 (17.0)	0.500^{a}	266	.618

a t Test.

^b χ² Test.

without sexual obsessions reported being in treatment for 11.2 ± 9.4 years ($t_{261} = -1.932$; P = .054). Subjects with sexual obsessions reported response rates similar to those reported by subjects who have OCD without sexual obsessions for both medication (38.9% compared with 47.6%; $\chi_1^2 = 0.930$; P = .335) and CBT (50.0% compared with 56.9%; $\chi_1^2 = 0.301$; P = .583). The 2 groups did not differ in the percentage of subjects currently on disability due to OCD.

Table 1 reports other clinical characteristics of subjects who have OCD with and without sexual obsessions. Subjects with current sexual obsessions were significantly more likely to report current aggressive and religious obsessions. Although subjects who have OCD with sexual obsessions did not report more severe OCD symptoms (evidenced by similar YBOCS total and subscale scores), there was a trend for greater depressive symptoms (demonstrated by higher HAM-D scores) in this group as compared with subjects without sexual obsessions. Insight, as measured by the BABS, did not differ between groups.

Other than a trend for higher rates of impulse control disorders in the sexual obsessions group, rates of lifetime Axis I comorbidity did not differ between groups. In particular, subjects with sexual obsessions were not more likely to have a comorbid mood or tic disorder.

The groups did not differ on total scores for the Q-LES-Q and SAS. Furthermore, scores on the Q-LES-Q item that assessed sexual drive and interest did not differ between those with and those without sexual obsessions (3.0 \pm 1.1 and 2.9 \pm 1.3, respectively; $t_{268} = -0.222$; P = .824). In terms of sexual functioning, subjects with sexual obsessions reported having sexual intercourse a mean of 2.1 \pm 1.0 times per week, which did not statistically differ from subjects who have OCD without sexual obsessions (2.3 \pm 1.3 times per week; $t_{138} = 0.564$; P = .574). No difference in reported intercourse frequency was found between the groups when analyses were restricted to married subjects.

4. Discussion

In this study, we determined the rates of sexual obsessions in 293 individuals with lifetime *DSM-IV* OCD. To our knowledge, this is the largest and broadest sample of individuals with primary OCD that has been studied and may increase the generalizability of the results. Almost one fourth (24.9%) of subjects with OCD in this study had sexual obsessions in their lifetime, and 13.3% had current sexual obsessions.

Subjects who have OCD with current sexual obsessions were similar to subjects who have OCD without sexual obsessions with respect to all demographic and most clinical characteristics assessed. In fact, the only significant findings in this study were that subjects who have OCD with sexual obsessions had an earlier age of OCD onset, an earlier entry into treatment, higher rates of aggressive and religious obsessions, as well as statistical trends for greater depressive

symptoms, longer duration of treatment, and higher rates of impulse control disorders. Our findings support other studies that have found an association between sexual, aggressive, and religious obsessions [5,13,14], but our study also found that these taboo obsessions (sex, aggression, religion) begin during puberty, an average of 4 years earlier than other OCD obsessions. Social understanding and comprehension emerge during puberty [25], and the taboo content of these pubertal obsessions may reflect the anxiety associated with social concerns commonly seen in this age group [25]. The maturational and psychological changes associated with puberty may also be involved in the pathogenesis of these obsessions. Given that treatment response rates were similar between the groups, the trend for an extended period of time in treatment for subjects with sexual obsessions may indicate that treatment needs to be continued to achieve response rates comparable to subjects without sexual obsessions.

Contrary to the earlier literature, subjects who have OCD with sexual obsessions in our sample were not more likely to be males [4,5], did not have higher rates of tic disorders or bipolar disorder [6-8], did not have poorer insight [9,10], did not report poorer response to either medication or CBT [9,10], and did not report poorer sexual functioning or satisfaction [11]. In fact, these results call into the question every prior assumption about sexual obsessions in OCD. Some reasons for the discrepancies may be the embarrassment in discussing sexual obsessions (and how this relates to subjects' comfort level with interviewers) as well as the variability with which sexual obsessions are ascertained (self-report, interview). In addition, several previous studies of sexual obsessions grouped sexual with aggressive and religious obsessions [9,10,13,14,26], and these analyses may have obscured the unique findings particular to subjects with sexual obsessions.

This study has several limitations. Because sexual obsessions are often denied, the rates found in this study may underestimate the actual rates in subjects with OCD. Because a clinical sample was used, it is unclear how generalizable our results are to individuals with OCD in the community. In addition, lack of diversity in our sample may suggest that these findings will not generalize to members of different ethnic and cultural groups. Nonetheless, our sample may generalize better than previous studies of clinical OCD in that the study inclusion/exclusion criteria were broad. The study also used both self-report and interviewer-administered measures with strong psychometric properties and established norms.

In conclusion, these results suggest that sexual obsessions are fairly common in subjects with OCD. Additional research on this topic is needed, including larger prevalence studies and replication studies of clinical correlates of sexual obsessions in OCD. Given the earlier age of OCD onset for patients with sexual obsessions, future research should also be directed at potential pubertal factors that may contribute to the etiology and pathophysiology of these particular

obsessions. Also greatly needed are treatment studies to identify whether treatments should be specially tailored for patients with sexual, aggressive, and religious obsessions.

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