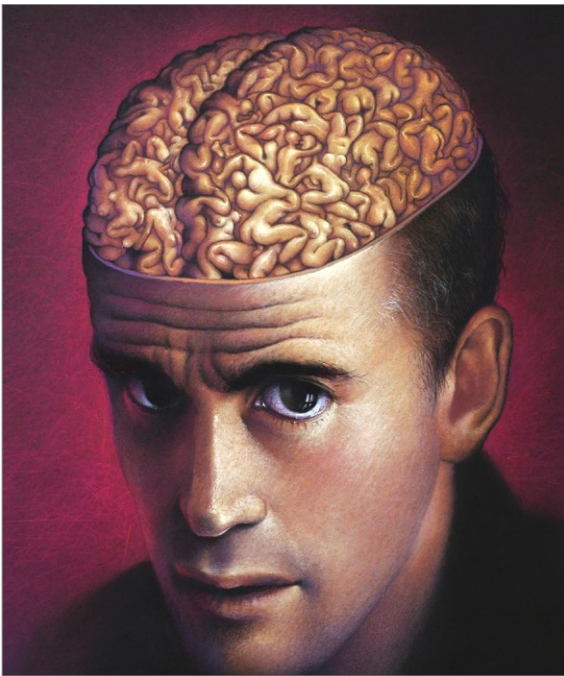


Compulsive sexual behavior: A nonjudgmental approach



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Despite limited evidence, this disorder can be accurately diagnosed and successfully treated

Compulsive sexual behavior (CSB), also referred to as sexual addiction or hypersexuality, is characterized by repetitive and intense preoccupations with sexual fantasies, urges, and behaviors that are distressing to the individual and/or result in psychosocial impairment. Individuals with CSB often perceive their sexual behavior to be excessive but are unable to control it. CSB can involve fantasies and urges in addition to or in place of the behavior but must cause clinically significant distress and interference in daily life to qualify as a disorder.

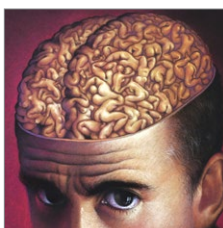
Because of the lack of large-scale, population-based epidemiological studies assessing CSB, its true prevalence among adults is unknown. A study of 204 psychiatric inpatients found a current prevalence of 4.4%,¹ while a university-based survey estimated the prevalence of CSB at approximately 2%.² Others have estimated that the prevalence is between 3% to 6% of adults in the United States,^{3,4} with males comprising the majority ($\geq 80\%$) of affected individuals.⁵

CSB usually develops during late adolescence/early adulthood, and most who present for treatment are male.⁵ Mood states, including depression, happiness, and loneliness, may trigger CSB.⁶ Many individuals report feelings of dissociation while engaging in CSB-related behaviors, whereas others report feeling important, powerful, excited, or gratified.

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A lack of recognition of CSB may be due to limited understanding of the limits of sexual normality

Why CSB is difficult to diagnose

Although CSB may be common, it usually goes undiagnosed. This potentially problematic behavior often is not diagnosed because of:

- **Shame and secrecy.** Embarrassment and shame, which are fundamental to CSB, appear to explain, in part, why few patients volunteer information regarding this behavior unless specifically asked.¹

- **Patient lack of knowledge.** Patients often do not know that their behavior can be successfully treated.

- **Clinician lack of knowledge.** Few health care professionals have education or training in CSB. A lack of recognition of CSB also may be due to our limited understanding regarding the limits of sexual normality. In addition, the classification of CSB is unclear and not agreed upon (*Box, 7-9 page 39*), and moral judgments often are involved in understanding sexual behaviors.¹⁰

No consensus on diagnostic criteria

Accurately diagnosing CSB is difficult because of a lack of consensus about the diagnostic criteria for the disorder. Christenson et al¹¹ developed an early set of criteria for CSB as part of a larger survey of impulse control disorders. They used the following 2 criteria to diagnose CSB: (1) excessive or uncontrolled sexual behavior(s) or sexual thoughts/urges to engage in behavior, and (2) these behaviors or thoughts/urges lead to significant distress, social or occupational impairment, or legal and financial consequences.^{11,12}

During the DSM-5 revision process, a second approach to the diagnostic criteria was proposed for hypersexuality disorder. Under the proposed criteria for hypersexuality, a person would meet the diagnosis if ≥3 of the following were endorsed over a 6-month period: (a) time consumed by sexual fantasies, urges, or behaviors repetitively interferes with other important (non-sexual) goals, activities, and obligations; (b) repetitively engaging in sexual fantasies, urges, or behaviors in response to dysphoric mood states; (c) repetitively engaging in sexual fantasies,

urges, or behaviors in response to stressful life events; (d) repetitive but unsuccessful efforts to control or significantly reduce these sexual fantasies, urges, or behaviors; and (e) repetitively engaging in sexual behaviors while disregarding the risk for physical or emotional harm to self or others.⁹

These 2 proposed approaches to diagnosis are somewhat similar. Both suggest that the core underlying issues involve sexual urges or behaviors that are difficult to control and that lead to psychosocial dysfunction. Differences in the criteria, however, could result in different rates of CSB diagnosis; therefore, further research will need to determine which diagnostic approach reflects the neurobiology underlying CSB.

Avoid misdiagnosis

Before making a diagnosis of CSB, it is important for clinicians to consider whether they are stigmatizing “negative consequences,” distress, or social impairment based on unconscious bias toward certain sexual behaviors. In addition, we need to ensure that we are not holding sex to different standards than other behaviors (for example, there are many things in life we do that result in negative consequences and yet do not classify as a mental disorder, such as indulging in less healthy food choices). Furthermore, excessive sexual behaviors might be associated with the normal coming out process for LGBTQ individuals, partner relationship problems, or sexual/gender identity. Therefore, the behavior needs to be assessed in the context of these psychosocial environmental factors.

Differential diagnosis

Various psychiatric disorders also may include excessive sexual behavior as part of their clinical presentation, and it is important to differentiate that behavior from CSB.

Bipolar disorder. Excessive sexual behavior can occur as part of a manic episode in bipolar disorder. If the problematic sexual behavior also occurs when the person’s



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mood is stable, the individual may have CSB and bipolar disorder. This distinction is important because the treatment for bipolar disorder is often different for CSB, because anticonvulsants have only case reports attesting to their use in CSB.

Substance abuse. Excessive sexual behavior can occur when a person is abusing substances, particularly stimulants such as cocaine and amphetamines.¹³ If the sexual behavior does not occur when the person is not using drugs, then the appropriate diagnosis would not likely be CSB.

Obsessive-compulsive disorder (OCD). Individuals with OCD often are preoccupied with sexual themes and feel that they think about sex excessively.¹⁴ Although patients with OCD may be preoccupied with thoughts of sex, the key difference is that persons with CSB report feeling excited by these thoughts and derive pleasure from the behavior, whereas the sexual thoughts of OCD are perceived as unpleasant.

Other disorders that may give rise to hypersexual behavior include neurocognitive disorders, attention-deficit/hyperactivity disorder, autism spectrum disorders, and depressive disorders.

Adverse effects of medication. It is important to ask the patient whether he (she) developed CSB after starting a medication. Certain medications (eg, medications for Parkinson's disease or restless leg syndrome, or aripiprazole to treat depression or psychosis) may cause patients to engage in problematic sexual behavior.^{15,16} If the sexual behavior decreases or stops when the medication dosage is reduced or the medication is stopped, a diagnosis of CSB would not be appropriate.

Comorbidity is common

Research suggests that approximately one-half of adults with CSB meet criteria for at least 1 other psychiatric disorder, such as mood, anxiety, substance use, impulse control, or personality disorders. A study

Box

Classifying compulsive sexual behavior

Various suggestions have been proposed for the classification of compulsive sexual behavior (CSB). It may be related to obsessive-compulsive disorder (OCD), forming an "obsessive-compulsive spectrum;" to mood disorders ("an affective spectrum disorder")^{7,8}; or as a symptom of relationship problems, intimacy, and self-esteem. Grouping CSB within either an obsessive-compulsive or an affective spectrum is based on symptom similarities, comorbidities, family history, and treatment responses. Similar to persons with OCD, CSB patients report repetitive thoughts and behaviors. Unlike OCD, however, the sexual behavior of CSB is pleasurable and often is driven by cravings or urges. Given these descriptions, CSB also may share features of substance use disorders, and has generated a theory of sexual behavior being an addiction. There is still much debate as to how best to understand this cluster of symptoms and behaviors—as a separate disorder or as a symptom of an underlying problem. DSM-5 did not find sufficient reason to designate sexual addiction as a psychiatric disorder.⁹

of men with CSB (N = 103) found that 71% met criteria for a mood disorder, 40% for an anxiety disorder, 41% for a substance use disorder, and 24% for an impulse control disorder such as gambling disorder.¹⁷ Therefore, to successfully treat CSB, clinicians also may need to focus on how and to what extent these co-occurring disorders drive the sexual behavior.

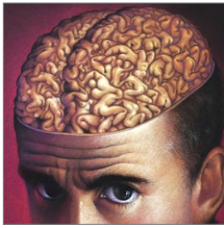
Co-occurring medical conditions also are common among individuals with CSB. Medical concerns may include unwanted pregnancy, sexually transmitted infections, and HIV/AIDS. Thus, treating psychiatric comorbidities and providing education about sexual health, with referrals to primary care specialists, often are part of CSB treatment.

Neuroimaging and cognition

One imaging study that compared participants with and without CSB found that participants with CSB had higher activity in the ventral striatum, anterior cingulate cortex,

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Various psychiatric disorders present with problematic sexual behavior. It's important to differentiate this behavior from CSB

and amygdala relative to controls during a cue-reactivity functional MRI task.¹⁸ These findings show notable similarities to the patterns of activation seen in patients addicted to drugs when assessed using drug-craving paradigms. An additional neuroimaging study assessing patients with hypersexuality using diffusion tensor imaging noted that diffusivity in a prefrontal white matter tract within a superior frontal region was greater in patients with CSB.¹⁸ This study also indicated that there was a negative correlation between observed diffusion in the noted location and overall severity score for CSB symptoms such as frequency of urges or behaviors.

In terms of cognition, a preliminary assessment of young adults with CSB compared with healthy controls did not find any differences between groups across several tasks, although the previously mentioned diffusion tensor imaging study reported elevated impulsivity in CSB.¹⁸

Approaches to treatment

Most people with CSB are reluctant to mention it to their health care providers, and most physicians are generally uncomfortable talking about sex with their patients, in part, because of a lack of training.¹⁹ Patients are more likely to bring up the topic when they are receiving treatment for anxiety, depression, or substance abuse. Therefore, clinicians must consider that sexual behavior might be associated with a coping mechanism, distressing outcome, or comorbid condition in these patients.

Pharmacologic treatment

Evidence for the pharmacologic treatment of CSB consists primarily of small, open-label studies, case series, or retrospective analyses, except for 1 double-blind, placebo-controlled study. Based on this evidence, there may be several pharmacologic treatment options for patients with CSB; however, there are no FDA-approved medications for CSB.

Antidepressants. One of the most thoroughly documented categories of

pharmacologic treatment for CSB is selective serotonin reuptake inhibitors (SSRIs). Several retrospective analyses and case series have reported on the general efficacy of SSRIs in reducing symptoms of CSB.²⁰⁻²³ Citalopram, the only treatment for CSB that has been assessed using a double-blind, placebo-controlled methodology, was associated with significant decreases in CSB symptoms, including sexual desire/drive, frequency of masturbation, and pornography use.²⁴

In addition to SSRIs, several additional case reports have suggested that other classes of antidepressants, such as serotonin-norepinephrine reuptake inhibitors and tricyclic antidepressants, or stimulants may be beneficial when treating CSB.²⁵ Several case reports have indicated significant improvement of CSB symptoms using clomipramine.²² A retrospective study of nefazodone also has suggested that it may be an option for treating CSB. Patients reported notable reductions in the frequency of sexual obsessions/compulsions while taking nefazodone and reported no notable sexual adverse effects.²⁶ One branded version of nefazodone, Serzone, was associated with rare but severe liver problems and was withdrawn from the U.S. market in 2004.

Although some initial evidence regarding antidepressant use, particularly SSRIs, to treat CSB has suggested that these medications may be potentially beneficial, the findings are far from conclusive, with only 1 controlled trial and only single-subject case reports for many of the medications studied.

Naltrexone, an opioid antagonist, has received support from available cases, open-label studies, and retrospective analyses.^{17,27} Although evidence for the use of naltrexone in CSB is limited to case reports and retrospective analyses, results have been positive. Naltrexone has shown notable decreases in CSB symptom severity when used as monotherapy and when used in combination with other treatments.

Anticonvulsants. Several case reports have suggested that certain anticonvulsants may

be beneficial for treating CSB. Topiramate may be a particularly useful option.²⁸ Other anticonvulsants showing benefit for CSB in case reports include valproic acid, lamotrigine, and levetiracetam.¹⁸

Psychotherapy

Evidence supporting specific types of psychotherapy for CSB is limited and largely drawn from uncontrolled studies and case reports.

Cognitive-behavioral therapy (CBT) is one of the more common psychotherapeutic options used for CSB. Several uncontrolled studies and case reports have found that CBT is beneficial for CSB, although methodologies have varied.

Several cases found that combining CBT with motivational interviewing was associated with significant reductions in sexual behaviors, such as frequency of sexual partners and amount of time spent online during work hours.^{29,30} Group CBT also has been shown to be effective for CSB.³¹

Acceptance and commitment therapy (ACT) has received some initial support, with 1 uncontrolled study and 1 controlled study.^{32,33} The controlled study used 12 sessions of individual ACT compared with a wait-list condition.³² Improvements in CSB symptoms were maintained for 3 months. The overall reduction in problematic Internet pornography use was reported as 92% immediately after the study ended, and 86% after 3 months.

Marital/relationship therapy has been used successfully in several case series and case reports, although no studies have assessed its efficacy in treating CSB using a randomized

Related Resource

• Carnes PJ. Out of the shadows: understanding sexual addiction. 3rd ed. Center City, MN: Hazelden Publishing; 2001.

Drug Brand Names

Aripiprazole • Abilify	Levetiracetam • Keppra
Citalopram • Celexa	Naltrexone • Revia
Clomipramine • Anafranil	Topiramate • Topamax
Lamotrigine • Lamictal	Valproic acid • Valproic

protocol. In 1 case report, the researcher found that participation in marital sex therapy elicited notable improvements over the course of 1 year and 20 sessions.³⁴

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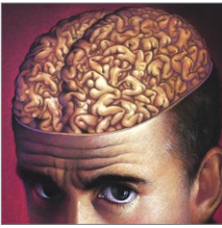
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Several cases found that combining CBT and motivational interviewing was associated with reductions in sexual behavior

Bottom Line

Limited research and a lack of standardized criteria can make compulsive sexual behavior (CSB) challenging to properly diagnose and treat. Initial evidence suggests that certain antidepressants and psychotherapeutic treatments can reduce symptoms of CSB.



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Although some initial evidence regarding antidepressant use, particularly SSRIs, shows promise, the findings are far from conclusive

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