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Understanding and Managing Compulsive Sexual Behaviors

ABSTRACT

Compulsive sexual behavior, otherwise known as sexual addiction, is an emerging psychiatric disorder that has significant medical and psychiatric consequences. Until recently, very little empirical data existed to explain the biological, psychological, and social risk factors that contribute to this condition. In addition, clinical issues, such as the natural course and best practices on treating sexual addictions, have not been formalized. Despite this absence, the number of patients and communities requesting assistance with this problem remains significant. This article will review the clinical features of compulsive sexual behavior and will summarize the current evidence for psychological and pharmacological treatment.



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INTRODUCTION

Sexuality in the United States has never been more socially acceptable. Sex has become part of mainstream culture as reflected through the explicit coverage of sexual behaviors in the media, movies, newspapers, and magazines. In many ways, sexual expression has become a form of accepted entertainment similar to gambling, attending sporting events, or watching movies. Internet pornography has become a billion-dollar industry, stretching the limits of the imagination. Digital media offers portability, access, and visually explicit depictions of sexual acts in high-definition that leave nothing to the imagination. Sales and rental of adult movies through DVDs and pay-per-view services allow access to sex anywhere and at any time. The adult entertainment industry generates close to \$4 billion per year and its acceptability in society is reflected in the mainstreaming of its products into traditional retail stores and the portrayal of its actors and actresses as role models and celebrities. Strip clubs have evolved from backroom cabarets into large multimillion dollar nightclubs and are present in virtually every state in the US. Inside them, the degree of physical contact has also increased, as compared to a generation ago, to the point where the boundaries of what constitutes sexual intercourse are blurred. Escort services, massage parlors, and street prostitution continue to be available in every major city in the US. Strengthening their presence and availability is the internet, which has created an information portal for these services through online dating services, classified ads, and discussion boards for those in pursuit of sexual gratification.

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inability to control sexual impulses resulting in continued engagement in these behaviors despite the creation of negative consequences—otherwise known as sexual addiction. This term has been used synonymously with others, such as compulsive sexual behaviors, hypersexuality, and excessive sexual desire disorder.¹ It can take many forms, and although it may seem obvious to diagnose, standardized criteria have yet to be developed. Furthermore, debate is ongoing about where this behavioral pattern fits into the *American Psychiatric Association's Diagnostic and Statistical Manual (DSM-IV)*, and how it should be classified and conceptualized.² Is it an addictive disorder, an impulse-control disorder, or a variant of obsessive compulsive disorders? Does it merit enough empirical evidence to stand alone as a separate disorder? Finally, what are the boundaries and limits that distinguish disease patterns, at-risk behaviors, and socially appropriate expression?

Compulsive sexual behavior has not yet received extensive attention from researchers and clinicians. To date, there have been very few formalized studies of compulsive sexual behaviors. As an example, a keyword search on PubMed, as of October, 2006, for “sexual addiction” yielded 518 articles, while “compulsive sexual behavior” yielded 264 (in comparison, “substance abuse”

yields 164,104). Funding agencies, such as the National Institutes of Health (NIH), and pharmaceutical companies have not supported research into the etiology and mechanisms of compulsive sexual behavior and, as a result, evidenced-based treatments are limited. Despite the paucity of research, a significant number of patients with sexual addictions do present for treatment. This is evidenced by the number of treatment centers dedicated to the treatment of sexual addictions in both residential and intensive outpatient settings. Mental health professionals in any setting are likely to encounter patients with this hidden addiction and require better tools to diagnose and manage them. This article will review the terminology, the epidemiology, and the existing treatments that are currently available for compulsive sexual behaviors.

DEFINING COMPULSIVE SEXUAL BEHAVIORS

The DSM-IV currently does not list compulsive sexual behavior as a separate disorder with formal criteria. There are 12 listed sexual disorders and they are divided into disorders of sexual dysfunction, paraphilias, and gender identity disorder.³ Among these disorders, there is no mention of repetitive, continued sexual behaviors that cause clinical distress and impairment. In fact, the only place

where compulsive sexual behaviors might be included is within the context of sexual disorder, not otherwise specified (NOS) or as part of a manic episode. In other words, *hypersexuality*, *sexual addiction*, or *compulsive sexual behaviors* are terms that are not found within the DSM-IV.

Some of the reasons for why there is a lack of formalized criteria include the lack of research as well as an agreed-upon terminology. This is due, in part, to the heterogeneous presentation of compulsive sexual behaviors.⁴ For instance, some patients present with clinical features that resemble an addictive disorder—i.e., continued engagement in the behavior despite physical or psychological consequences, a loss of control, and a preoccupation with the behavior. Others will demonstrate elements of an impulse control disorder, namely reporting irresistible urges and impulses, both physically and mentally, to act out sexually without regard to the consequences. Finally, there are patients who demonstrate sexual obsessions and compulsions to act out sexually in a way that resembles obsessive compulsive disorders. They do so to quell anxiety and to minimize fears of harm. For these patients, the thoughts and urges to act out sexually are ego-dystonic, whereas other types of patients describe ego-syntonic feelings about their sexual behaviors.

One important feature to note is that hypersexuality is not necessarily symbolic or diagnostic of compulsive sexual behaviors. Libido and sexual drive can be seen as similar to other biological drives, such as sleep and appetite. States of hypersexuality induced by substances of abuse, mania, medications (e.g., dopamine agonists), or even other medical conditions (e.g., frontal-lobe tumors) can induce episodes of impulsive and excessive sexual behaviors.⁵ However, once those

primary conditions are treated, the sexual behaviors return to normalcy in terms of frequency and intensity.

CLINICAL FEATURES

Compulsive sexual behaviors can present in a variety of forms and degrees of severity, much like that of substance use disorders, mood disorders, or impulse-control disorders. Often, it may not be the primary reason for seeking treatment and the symptoms are not revealed unless inquired about. Despite the lack of formalized criteria, there are common clinical features that are typically seen in compulsive sexual behaviors.

One of the fundamental hallmarks of compulsive sexual behavior is continued engagement in sexual activities despite the negative consequences created by these activities. This is the same phenomenon seen in substance use and impulse control disorders. Psychologically, sexual behaviors serve to escape emotional or physical pain or are a way of dealing with life stressors.⁶ The irony is that the sexual behaviors becomes the primary way of coping and handling problems that, in turn, creates a cycle of more problems and increasing desperation, shame, and preoccupation.

Compulsive sexual behavior can be divided into paraphilic and non-paraphilic subtypes. Paraphilic behaviors refer to behaviors that are considered to be outside of the conventional range of sexual behaviors. These include the eight paraphilias recognized in the DSM-

IV: Exhibitionism, voyeurism, pedophilia, sexual masochism, sexual sadism, transvestic fetishism, fetishism, and frotterism.³ There are many other forms of paraphilias that are not listed in DSM-IV (e.g., gerontophilia, necrophilia, zoophilia) that exist but have not been yet recognized as clinical disorders. A key clinical feature in diagnosing a paraphilic sexual behavior is that it must be distressing and cause significant impairment in one's life, with the exception of pedophilia and fetishism. In other words, with the noted exceptions, engagement in these behaviors leads to sexual gratification but does not cause distress or impairment and do not represent clinical disorders.⁷ Thus, frequency, amount of time spent, and amount of money spent are not necessarily reliable indicators of the presence of a compulsive sexual disorder. Paraphilias begin in late adolescence and peak in the mid-20s.⁸ Commonly, paraphilias do not occur in isolation; as the expected course is characterized by multiple paraphilic and non-paraphilic behaviors.⁶

Non-paraphilic behaviors represent engagement in commonly available sexual practices, such as attending strip clubs, compulsive masturbation, paying for sex through prostitution, excessive use of pornography, and repeated engagement in extramarital affairs. The onset, clinical course, and male predominance are fairly similar to paraphilic disorders.⁹ Various epidemiological studies estimate

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that close to six percent of the general population meet criteria but there are no national or large datasets to confirm this.⁸ Because of the variety of activities possible, non-paraphilic compulsive sexual behavior can present in a number of ways. This has the potential to confuse and cloud clinicians. In addition, a clinician that screens only for some but not all of the potentially problematic sexual behaviors is likely to miss

compulsive sexual disorder exists based on physical examination alone.

Consequences of compulsive sexual behaviors can vary with some being similar to that seen in other addictive disorders while others are unique. Medically, patients are at a higher risk for sexually transmitted diseases (STDs) and for physical injuries due to repetitive sexual practices. Human immunodeficiency virus

what a satisfying sexual relationship should be. At the same time, the deception, secrecy, and violations of trust that occur with compulsive sexual behaviors may shatter intimacy and personal connections. The result is a warped view of intimacy that often leads to separation and divorce and, in turn, puts any future healthy relationship in doubt.

Finally, the shame and guilt that those with compulsive sexual behaviors experience is different from those with other addictive disorders. There are no substances of abuse to explain seemingly irrational behaviors. The stigma of not being able to control sexual impulses carries with it a connotation of depravity and moral selfishness. Stigmatization in the media and criminalization of “sexual offenders” creates an atmosphere that does not promote treatment and prevention. As a result, access to care and seeking care, even when one recognizes that sexual behaviors are out of control, is a decision faced with barriers and limitations.

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important clinical information. Thus, asking about both paraphilic and non-paraphilic behaviors is critical in screening. In addition, it is important to assess the consequences as well as the nature of the behavior. A person who spends \$1000 per week on strip clubs may at first glance appear to meet criteria, but if there are no notable adverse consequences in his or her life, then the disorder may not be present.

Identifying a compulsive sexual disorder is a challenge because of its sensitive and personal nature. Unless patients present specifically for treatment of this disorder, they are not likely to discuss it.¹⁰ Much like other impulse control disorders, the physical and psychological signs of compulsive sexual behaviors are often subtle or hidden. Even signs of excessive sexual behaviors (such as physical injury to the genital area) or the presence of sexually transmitted diseases does not necessarily indicate compulsive sexual activity. Their presence does signal the need to screen for those behaviors but one cannot assume a

(HIV), Hepatitis B and C, syphilis, and gonorrhea are particularly concerning consequences.^{13,14} Virtually unknown is the percentage of those individuals with STDs who meet criteria for compulsive sexual disorders.

Another significant consequence is the loss of time and productivity. It is not uncommon for patients to spend large amounts of time viewing pornography or cruising (also called mongering) for sexual gratification. Financial losses can mount quickly, and patients can accumulate several thousands of dollars of debt in a short amount of time. In addition, there is a long list of legal consequences, including arrest for solicitation and engaging in paraphilic acts that are illegal. One look at recent news headlines will likely reveal several stories focusing on illegal sexual activities or behaviors that jeopardize someone’s livelihood or wellbeing.

The psychological consequences are numerous. Effects on the family and interpersonal relationships can be profound. Compulsive sexual behaviors can establish unhealthy and unrealistic expectations of

EPIDEMIOLOGY

There have been no national studies documenting the past-year or lifetime prevalence of compulsive sexual behaviors in the general population. Regional and local surveys suggest that approximately five percent of the general population may meet criteria for a compulsive sexual disorder (using criteria that are similar to substance use disorders).⁷ Further replication of these data is needed but if true, these rates represent a significant percentage of the general population and would be higher than the rates for schizophrenia, bipolar disorder, and pathological gambling. One of the reasons why reliable epidemiological data are lacking is the inconsistency in defining criteria for compulsive sexual behaviors, lack of funding, and the lack of researchers committed to documenting the

extent of this problem. Most of what is known about the epidemiological nature of this disorder comes from clinical treatment programs that focus on sexual addictions. Men appear to outnumber women with compulsive sexual behaviors.⁷ Comorbidities include substance use disorders and co-occurring impulse control disorders, and there is an association with histories of sexual abuse.^{15,16} Other significant epidemiological data is simply not known, such as the rate of compulsive sexual behaviors among prosecuted sex offenders or the rate among those who work within the adult entertainment industry.

ETIOLOGY

As with impulse control and substance use disorders, no single biological cause has yet been identified to explain the origins and maintenance of compulsive sexual behaviors. Neuroscience research, which would be an excellent approach to understand basic brain differences between those with and without compulsive sexual behaviors, has rarely been applied to this population. In particular, neuroimaging studies in patients with compulsive sexual behaviors would be interesting to compare with those involved in substance

frontal lobe lesion, tumors, and in those with neurological conditions that involve temporal lobes and midbrain areas such as seizure disorders, Huntington's disease, and dementia.¹⁷⁻¹⁹ Frontal lobe damage may trigger the expression of disinhibited behaviors, which could partially explain the increased sexual activity along with decreased control.²⁰ Still, more investigation is needed to understand the specifics of aberrant behaviors because there are certainly those individuals with frontal lobe injuries that do not experience the emergence of compulsive sexual behaviors.

Neurotransmitter studies in compulsive sexual behaviors have focused on the monoamines, namely serotonin, dopamine, and norepinephrine.²¹ Again, research in clinical populations is scant. Normal sexual functioning involves all of these monoamines as evidenced by selective serotonin reuptake inhibitor (SSRI)-induced sexual dysfunction and the increased sexuality observed among those on stimulants. Cases of hypersexual behavior have also been shown to be induced by medications for Parkinson's disease, implicating dopamine systems in compulsive sexual behaviors.^{22,23} What remains unclear is understanding how these

functioning. Testosterone levels have been correlated to sexual functioning but curiously, levels do not necessarily correlate to libido and sexual desires.²⁴ The implication of these hormones in compulsive sexual behaviors is critical to understand. It may be that regions of reward and pleasure are modulated by these hormones through facilitating or enhancing the response to sex and the desire for sex.

CLINICAL ASSESSMENT MEASURES

There are existing screening instruments, which are only as valid as the responder's honesty and integrity. Although this is true of all psychiatric screening instruments, revealing sexual practices is probably the most humbling because of its private nature. Questions about time spent on sexual activities and impact of functioning are important clinically, but also rely on self-report. Patrick Carnes, one of the pioneers in the field of compulsive sexual behavior research, developed the Sexual Addiction Screening Test, which is a 25-item, self-report symptom checklist that can be used to identify those at risk to develop compulsive sexual behaviors.¹¹ The Sexual Addiction Screening Test has also been modified for women and for internet sexual behaviors. Kafka has suggested a behavioral screening test (i.e., Total Sexual Outlet) in which a total of seven sexual orgasms per week, regardless of how they are achieved, could represent at-risk behavior and requires further clinical exploration.¹²

TREATMENT: PSYCHOSOCIAL

Various types of psychosocial treatments are available for individuals suffering from compulsive sexual behaviors. The most widely available and accessible are Sexual Addicts Anonymous, Sex and Love Addicts Anonymous, and Sexaholics Anonymous.²⁵ All three are modeled

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abuse and other behavioral addictions. To date though, most of the neuroimaging work has been done with nonclinical populations and has examined the biology of sexual arousal in healthy subjects.

Hypersexual behaviors have been reported in patients with

perturbations in neurochemical functions differentiate compulsive sexual behaviors from those with hypersexuality alone without a negative life impact.

In addition to neurotransmitters, the sex hormones are obviously a critical component to sexual

after 12-step theory and practice, and are available throughout the US. There is almost no data evaluating their efficacy or effectiveness. Nevertheless, participation in these groups is usually recommended because they provide a place for fellowship, support, structure, and accountability, and they are free of charge.

Inpatient and intensive outpatient treatment programs for compulsive sexual behaviors usually focus on helping to identify core triggers and beliefs about sexual addiction and to develop healthier choices and coping skills to minimize urges and deal with the preoccupation of sexual addiction.

Individual psychotherapy for compulsive sexual behaviors is varied but the two most common approaches are cognitive behavioral therapy (CBT) and psychodynamic psychotherapy. CBT in compulsive

therapy are not sex therapy, but individual therapy that focuses on reducing or controlling compulsive sexual behaviors.²⁶

Other forms of therapy may be helpful, as well. For example, family therapy and couples therapy may restore trust, minimize shame/guilt, and establish a healthy sexual relationship between partners.²⁷

As for the assessment of treatment outcome, one of the unique difficulties in compulsive sexual behavior is determining when a patient has relapsed. Since there are no biological tests to indicate relapse, collateral history and functioning within the patient's significant relationship tends to be the most reliable markers. Despite the availability of psychosocial treatments, there are little data documenting treatment outcomes, success rates, predictors of treatment outcome.

seen in other disorders, such as substance use or obsessive compulsive disorders.

SSRIs have been tried for both paraphilic and non-paraphilic compulsive sexual behaviors through both case series and open-label studies.^{24,28} No one SSRI has demonstrated superior efficacy to another. Theoretically, SSRIs may decrease the urges/craving and preoccupation associated with sexual addiction. Attempting to use SSRIs to create sexual dysfunction through their side effect profile and thus to reduce compulsive sexual behaviors does not appear to be effective. Clinical experience suggests that patients who respond best to SSRIs have co-occurring psychiatric disorders, such as depression, anxiety, or obsessive compulsive disorders. Those who do not have sexual dysfunction from SSRIs have the best treatment response.

Mood stabilizers, such as valproic acid and lithium, appear promising in the treatment of patients with bipolar disorder and compulsive sexual behaviors.^{31,32} Whether this class of medications has an independent effect on reducing compulsive sexual behaviors in patients without comorbid bipolar disorder remains to be seen.

sexual behaviors borrows greatly from treatment with substance use disorders, focuses on identifying triggers to sexual behaviors and reshaping cognitive distortions about sexual behaviors (e.g., "I'm not really cheating on my spouse if I go to a massage parlor"), and emphasizes relapse prevention. Psychodynamic psychotherapy in compulsive sexual behaviors explores the core conflicts that drive dysfunctional sexual expression. Themes of shame, avoidance, anger, and impaired self-esteem and efficacy are common.²⁶ Note that these types of

TREATMENT: PHARMACOTHERAPY

There are no US Food and Drug Administration (FDA)-approved medications for compulsive sexual behaviors. While preliminary case reports and open-label trials that have been conducted, no known randomized, double-blind placebo-controlled trials have been published.²⁴ Various classes of medications have been tried, including antidepressants, mood stabilizers, antipsychotics, and antiandrogens. The rationales for these drugs are based on clinical phenomenology and symptoms

In addition to SSRIs, naltrexone, an opiate antagonist, has been evaluated in the treatment of compulsive sexual behaviors. Grant describes a case report of co-occurring kleptomania and compulsive sexual behaviors treated successfully with naltrexone after treatment failure with SSRIs and psychotherapy.²⁹ The rationale for using this medication is based on previous work in substance abuse populations and pathological gamblers, where the intent is to reduce the cravings and urges by blocking the euphoria associated

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with the behavior. In an open-label trial of naltrexone with adolescent sexual offenders, 15 out of 21 patients noted reductions in sexual impulses and arousal.³⁰ There have also been studies examining the efficacy of intramuscular naltrexone in this clinical population.

Mood stabilizers, such as valproic acid and lithium, appear promising in the treatment of patients with bipolar disorder and compulsive sexual behaviors.^{31,32} Whether this class of medications has an independent effect on reducing compulsive sexual behaviors in patients without comorbid bipolar disorder remains to be seen. Other medications, such as topiramate and nefazadone, have also been tried, but further replication is needed to determine their effectiveness.^{33,34}

In the treatment of paraphilic compulsive sexual behaviors, some pharmacotherapy strategies have focused on altering or attenuating sexual hormone function.³⁵ Anti-androgens, such as medroxyprogesterone acetate (300–500mg per week, intramuscularly) or cyproterone acetate (300–600mg per week, intramuscularly), lower serum testosterone levels and diminish sexual drive and desire.^{24,35} On a more drastic level, surgical intervention (castration) has been shown to reduce recidivism in sexual offenders by theoretically lowering testosterone levels to reduce urges and cravings. There are no known double-blind, randomized studies of anti-androgenic agents in the treatment

of non-paraphilic compulsive sexual behaviors. However, case reports and open label studies suggest these may be effective treatments.¹³ Of importance to note, this treatment approach is temporary. Once the medications are stopped, testosterone levels will return to normal levels. This treatment approach has not been utilized in the non-paraphilic sexual behaviors.

CONCLUSIONS AND FUTURE DIRECTIONS

We have much to learn about compulsive sexual behaviors, particularly their neurobiological roots, psychological risk factors, and the impact of societal values on their emergence. For now, compulsive sexual behaviors are the extreme end of a wide range of sexual experience. These behaviors can present in a variety of manners and undoubtedly have many different subtypes, severities, and clinical courses. Clinicians can enhance the identification and treatment of these disorders by implementing formal screening practices, becoming familiar with the warning signs, and knowing which types of patients are vulnerable. In time, research will begin to uncover the different subtypes of compulsive sexual behaviors as well as determine which treatment and prevention practices work the best. Currently, since there are no guidelines from which clinicians can work, we are left to review the work of those who specialize in the treatment of compulsive sexual behaviors.

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