Compulsive buying disorder: a review and a Case Vignette

Compras compulsivas: uma revisão e um relato de caso

Hermano Tavares,¹ Daniela Sabbatini S Lobo,² Daniel Fuentes,³ Donald W Black ⁴

Abstract

Objective: Compulsive buying disorder was first described as a psychiatric syndrome in the early twentieth century. Its classification remains elusive, and investigators have debated its potential relationship to mood, substance use, obsessive-compulsive, and impulse control disorders. The objective of this study is to present a review of compulsive buying disorder and present a case vignette. **Method:** Two databases were reviewed (Medline and PsycINFO) in search for articles published in the last 40 years. Selected terms included oniomania, compulsive buying disorder is a prevalent and chronic condition that is found worldwide, sharing commonalities with impulse control disorders. In clinical samples, women make up more than 80% of subjects. Its etiology is unknown, but neurobiologic and genetic mechanisms have been proposed. The disorder is highly comorbid with mood, substance use, eating and impulse control disorders. **Conclusions:** Treatment recommendations derived from the literature and clinical experience suggest that problem shoppers can benefit from psychosocial interventions. Cognitive-behavioral group models appear promising. Medication trials have reported mixed results. The identification and treatment of psychiatric comorbidity is also a key aspect of treatment. In order to determine the validity of compulsive buying disorder, future work should focus on psychopathology and neurobiological findings unique to the syndrome.

Descriptors: Oniomania; Compulsive buying; Personality; Treatment; Impulse control disorders

Resumo

Objetivo: O transtorno do comprar compulsivo foi descrito pela primeira vez como uma síndrome psiquiátrica no começo do século XX. Sua classificação permanece incerta e os investigadores têm debatido uma correlação potencial com transtornos do humor, transtorno obsessivo-compulsivo e transtornos do impulso. O objetivo deste estudo é apresentar uma revisão de transtorno do comprar compulsivo e um relato de caso. **Método:** Duas bases de dados foram investigadas (Medline e PsycINFO) em busca de artigos publicados nos últimos 40 anos. Os unitermos selecionados foram "oniomania" e "compras compulsivas". Outros artigos relevantes também foram identificados por meio das listas de referências. **Resultados:** O transtorno do comprar compulsivo é uma condição crônica e prevalente encontrada ao redor do mundo, que divide características comuns com transtornos do controle do impulso. Em amostras clínicas, mulheres perfazem mais de 80% dos sujeitos. Sua etiologia é desconhecida, mas mecanismos neurobiológicos e genéticos têm sido propostos. O transtorno apresenta altas taxas de comorbidade com transtornos do humor, abuso de substâncias, transtornos alimentares e transtornos do controle do impulso. **Conclusão:** As recomendações terapêuticas derivadas da literatura e da experiência clínica sugerem que compradores compulsivos podem se beneficiar de intervenções psicossociais. Modelos de intervenção cognitivo-comportamental de grupo parecem promissores. Ensaios farmacológicos relatam resultados conflitantes. A identificação e o tratamento das comorbidades psiquiátricas são também um aspecto chave do tratamento. Para determinar a validade do transtorno do comprar compulsivo, os futuros trabalhos devem enfocar os achados psicopatológicos e neurobiológicos específicos à síndrome.

Descritores: Oniomania; Compras compulsivas; Personalidade; Tratamento; Transtornos do controle do impulso

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Correspondence

Hermano Tavares Rua Purpurina 155, cjs. 126/128 05435-030, São Paulo, SP, Brazil Phone/fax: (55 11) 3814-3920 E-mail: hermanot@uol.com.br

¹ Pathological Gambling and Impulse Control Disorders Clinic (AMJO), Institute of Psychiatry, Hospital das Clínicas, Universidade de São Paulo Medical School (USP), São Paulo (SP), Brazil

² Neurogenetics Section, Centre of Addiction and Mental Health, University of Toronto, Toronto, Canada

³ Psychology & Neuropsychology Unit, Institute of Psychiatry, Hospital das Clínicas, Universidade de São Paulo Medical School (USP), São Paulo (SP), Brazil

⁴ University of Iowa Roy J. and Lucille A. Carver College of Medicine, Iowa City, IA 52246, USA

Introduction

The act of buying developed in ancient Greece, where the emergence of money changed cultural and moral values. Power was determined not by family name, but by commerce, which was greatly enhanced by the adoption of monetary systems. The act of making a purchase has continued to beguile and entrance people in subsequent millennia, and has prompted concerns that it can lead to a clinical disorder.

Descriptive psychiatrists, Kraepelin¹ and Bleuler² both wrote about compulsive buying behavior, or oniomania, in the early twentieth century. They based their descriptions of the disorder on Esquirol's³ concept of monomania. Writes Bleuler:² "the particular element (in oniomania) is impulsiveness; they cannot help it, which sometimes even expresses itself in the fact that not withstanding a good school intelligence, the patients are absolutely incapable to think differently and to conceive the senseless consequences of their act, and the possibilities of not doing it. They do not even feel the impulse, but they act out their nature like the caterpillar which devours the leaf". Kraepelin described excessive buying (oniomania) as a "pathological impulse".² Bleuler classified oniomania with the "reactive impulses," which included pyromania and kleptomania.

Compulsive buying disorder (CBD) attracted little attention over the following decades except among consumer behaviorists^{4,5} and psychoanalysts.⁶ Interest was revived in the early 1990s, when three independent clinical case series involving a total of 90 subjects were published.⁷⁻⁹ The disorder has been described worldwide with reports coming from the US, Canada,¹⁰ England,⁵ Germany,¹¹ France,¹² and Brazil.¹³ While the cost of the disorder has never been calculated, it has been estimated that impulse buying generates over \$4 billion in annual sales in North America.¹⁴

The classification of CBD remains elusive, and the disorder is not included in contemporary nosologic systems, such as the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), or the World Health Organization International Classification of Diseases, Tenth Edition.

Some researchers have considered CBD as an addictive disorder,¹⁵ and grouped it with alcohol and drug use disorders. Others consider it as part of the obsessive-compulsive,¹⁶ or the mood disorders spectrum.¹⁷ This is a proposed category combining behavioral addictions and includes pathological gambling, kleptomania, pyromania, internet addiction, and compulsive sexual behavior along with CBD. Some writers have criticized attempts to categorize CBD as a disorder, which they see as part of a trend to "medicalize" behavioral problems.¹⁸ Unfortunately, this approach ignores the reality of CBD, and stigmatizes attempts to understand or treat the condition.

The objective of the current study is to present a brief review on disordered buying behavior illustrated with a case vignette. Disordered buying behavior has been mainly referred to as "compulsive buying" or "compulsive shopping." Neither term should be construed to imply a relationship to either compulsive or impulsive disorders because its true nature is undetermined. The terms compulsive buying disorder and compulsive shopping will be used interchangeably.

Literature review

The authors searched Medline and PsycINFO for articles published since 1966, using as terms oniomania, buying, and shopping. Then articles retrieved were further crossed with the terms impulsive, compulsive, pathological and disorder. Seventy-four articles specifically addressing disordered buying/shopping behavior (e.g. prevalence, diagnosis, psychopathology, etiology, or treatment) were selected. Only two articles had been published in the 1980s, the remaining ones were published after that; most (47 articles) have been published since 2000. Due to editorial constrictions not all retrieved articles could be mentioned in this manuscript version, but the full list is available upon request to the corresponding author.

1. Epidemiology

Faber and O'Guinn administered the Compulsive Buying Scale (CBS) to 292 respondents in Illinois and estimated the prevalence of CBD to fall between 2% and 8% of the general population.¹⁹ More recently, Koran et al. estimated the point prevalence of CBD at nearly 6% of respondents based on results from a random telephone survey of 2,513 adults, using a CBS score two standard deviations below the mean.²⁰ A prevalence of 1.4% was calculated using the even stricter criterion of three standard deviations below the mean. Grant et al. reported a lifetime prevalence rate of CBD of just over 9% among 204 consecutively admitted psychiatric inpatients.²¹ Despite increasing scientific and lay interest, there is no evidence that CBD is increasing in prevalence.

Clinical research shows that from 80% and 94% of compulsive shoppers are women.7-9 Both Kraepelin and Bleuler had observed that compulsive buying mainly affected women.^{1,2} Kraepelin had concluded that some women become uncontrolled buyers because of their attraction to risky and exciting situations, comparing this impulse to the behavior observed in pathological gamblers who were mostly men. Nevertheless, Koran et al. have recently reported that the frequency of CBD is nearly equal in men and women (5.5% and 6.0%, respectively).²⁰ Their finding suggests that the reported gender difference may be artifactual, and perhaps related to the fact that women seem to more readily acknowledge that they enjoy shopping than do men. Yet, Dittmar wrote that the gender difference is genuine and not due to men being underrepresented in clinical samples.²² She based this conclusion on the results of a general population survey in the United Kingdom in which 92% of respondents considered compulsive shoppers were women.

CBD is reported to have an onset in the late teens or early 20's, which may correlate with emancipation from the nuclear family, as well as the age at which people first establish credit.²³ Interestingly, uncontrolled buying in adolescents is likely to be associated with a more generalized pattern of behavioral disinhibition that includes cigarette smoking, alcohol use, drug use, and early sex.²⁴ Because one can now shop around the clock online, and even adolescents have credit

cards, it is likely that some compulsive buyers will begin adult life with substantial debt. Of note, Black et al. reported that CBD was relatively frequent (19%) in a sample of persons with compulsive computer use.²³

There are no long-term follow-up studies of CBD, but data from Schlosser et al. and Christenson et al. suggest that for most persons the disorder is either chronic or recurrent.^{7,9} Aboujaoude et al. recently reported that persons who responded to treatment with citalopram were likely to remain in remission during one year follow-up.²⁵ This finding suggests that treatment could alter the natural history of the disorder.

2. Diagnosis

In the consumer behavior literature, Faber and O'Guinn describe CBD as a chronic and repetitive behavior that is difficult to stop and results in harmful consequences; moreover, it occurs in response to negative events or feelings.¹⁹ McElroy et al. developed operational diagnostic criteria for CBD, that emphasize inability to resist the urge to buy, maladaptive preoccupation with buying, and accompanying impairment.⁸ Mania and hypomania are exclusions to the diagnosis (Table 1). These criteria have found wide acceptance in the research community, although their reliability and validity have not been determined.

It is important to distinguish normal from uncontrolled buying. Importantly, the distinction is not made on the grounds of the amount of money spent or income level, but on the extent of the preoccupation, the level of personal distress, and the development of adverse consequences. Many people will have occasional buying sprees, particularly in special situations (e.g., birthdays, holidays), but episodic overspending by itself does not constitute evidence in support of a diagnosis of CBD.

Several instruments have been developed to assess CBD or rate its severity. The CBS, mentioned earlier, appears to reliably distinguish normal from pathological buyers.¹⁹ It consists of seven items representing specific behaviors, motivations, and feelings associated with CBD. Edwards has developed a useful 13-item scale that assesses important experiences and feelings about shopping and spending.²⁶ Monahan et al. modified the Yale Brown Obsessive-Compulsive Scale to measure severity of CBD, and change during clinical trials.²⁷ The 10-item scale rates time involved, interference, distress, resistance, and degree of control for both cognitions and behaviors typical of CBD. Other

Table 1 - Diagnostic criteria for compulsive buying⁸

2) Frequent buying of more that can be afforded, frequent buying of items that are not needed, or shopping for longer periods of time than intended

B. The buying preoccupations, impulses or behaviors cause marked distress, are time consuming, significantly interfere with social or occupational functioning, or result in financial problems (e.g., indebtedness or bankruptcy)

C. The excessive buying or shopping behavior does not occur exclusively during periods of hypomania or mania

groups have developed scales although they have not found wide use.

The Minnesota Impulsive Disorders Interview is a semistructured interview developed by Christenson et al. to assess the presence of CBD, kleptomania, trichotillomania, intermittent explosive disorder, compulsive sexual behavior, pathological gambling, and compulsive exercise.⁷ Grant et al.²¹ reported that the instrument had a sensitivity of 100% and a specificity of 96% for CBD when comparing the instrument to the criteria of McElroy et al.⁸

3. Psychiatric comorbidity

CBD is frequently comorbid with mood and anxiety disorders, substance use disorders, and eating disorders.^{7,9,23} In one telling comparison, Lejoyeux et al. compared depressed compulsive buyers with depressed control subjects.²⁸ The compulsive buyers had significantly more recurrent depression, bipolar disorder, kleptomania, bulimia, suicide attempts, and benzodiazepine abuse. Subjects with more severe CBD are more likely to have Axis I or II comorbidity than those with less severe forms of the disorder.

Although a relationship with obsessive-compulsive disorder (OCD) has been proposed, only one of four relevant studies reported a high prevalence of OCD (35%) among compulsive buyers;⁸ the prevalence ranged from 2% to 6% in other studies.^{7,9,29} Conversely, some studies have found CBD to be frequently comorbid with OCD; in fact, the presence of CBD may characterize a specific subset (10%) of impulsive OCD patients.^{30,31} Frost et al. have suggested that uncontrolled shopping is related to hoarding behavior observed among OCD patients, and is therefore a compulsive symptom.³² These investigators suggest that, like betting for pathological gamblers, persons with CBD feel that in resisting a purchase they will lose out on a bargain. This fear has been compared to the fear of losing something potentially valuable that compulsive hoarders report.

The association of CBD with other impulse control disorders (ICD) has also been reported.^{7-9,12} A significant comorbidity with psychogenic excoriation, binge eating and other impulsive behaviors has been reported. Personality disorders are also common in persons with CBD, and rates have been reported to range from 50% to 60%. Black et al. reported in a study of 31 persons with CBD that the most frequent Axis II diagnoses were borderline, antisocial and narcissistic personality disorders.²⁹ In another study, obsessive-compulsive, borderline and avoidant personality disorders were the most common.⁹

In terms of dimensional personality traits, Lejoyeux et al. reported that depressed compulsive shoppers had higher scores than depressed normal buyers on the experience-seeking subscale of the Zuckerman Sensation Seeking Scale, as well as the cognitive impulsivity, motor impulsivity, non-planning activity, and total scores for the Barratt Impulsiveness Scale.¹² O'Guinn and Faber had reported high levels of compulsivity, materialism, and fantasy, but lower levels of self-esteem in compulsive buyers as compared to normal buyers.⁴

A. Maladaptive preoccupation with buying or shopping, or maladaptive buying or shopping impulses or behavior, as indicated by at least one of the following:

¹⁾ Frequent preoccupation with buying or impulses to buy that is / are experienced as irresistible, intrusive, and / or senseless

4. Clinical manifestations

Many compulsive buyers describe their behavior as repetitive, with intrusive thoughts about shopping that they try to resist, usually without much success.^{7,13} In addressing the mixed nature of CBD, Nataraajan and Goff have proposed two independent factors: the buying urge or desire, and the control over buying.³³ In this scheme, compulsive shoppers would be represented by high urge combined with low control. These observations are consistent with clinical reports that compulsive buyers are preoccupied with shopping and spending and exercise little control over their impulses to buy. They typically spend many hours each week engaged in these behaviors.^{7,9} Compulsive shoppers often display a great fashion sense, consistent with their intense interest in new clothing styles and products.

Persons with CBD often describe an increasing level of anxiety that can only be relieved when a purchase is made.⁷ The actual shopping experience is described as intense for many individuals with CBD; some even describe experiencing a sexual feeling.9 The act is completed with the purchase, often followed by a sense of let down, or disappointment with oneself. The items may be stored in a closet or attic and not used, or are sometimes returned to the store. Compulsive shopping behavior occurs year round, although some patients report that their overspending occurs in "binges." The experience of shopping is solitary or most, and while the purchases are generally for oneself, compulsive buyers may overspend on their partner or spouse, children, or friends. CBD can occur in any shopping venue ranging from upscale department stores to consignment shops or garage sales. Internet and catalog shopping are also popular with compulsive shoppers.

Miltenberger et al. reported that negative emotions such as anger, anxiety, boredom, and self-critical thoughts were the most common antecedents to shopping binges in a group of persons with CBD, while euphoria or relief of the negative emotions were the most common consequences.³⁴ Lejoyeux et al. conclude that for some persons, "uncontrolled buying, like bulimia, can be used as a compensatory mechanism for depressive feelings".¹⁷ Faber concludes that shopping behavior is likely to become problematic when it provides a sense of recognition and acceptance for people with low self-esteem, allowing them to act out anger or aggression while providing an escape from their day to day drudgery.¹⁹

Clothing, shoes, jewelry, make up, and compact discs are favorite categories for items purchased by compulsive shoppers; some patients will report buying a product based on its attractiveness or because it was a bargain. Several writers have commented on the emotional significance of the types of objects purchased.⁹ While not large or expensive in and of themselves, the items appear to address personal and social identity needs.³⁵ This explanation for compulsive buying behaviors may apply to some, but not all persons with CBD; one relevant study found that the role of self-image in the motivations underlying CBD was more closely linked to women than to men.²² A wide spectrum of severity is found for CBD. In a study of 44 persons with CBD, Black et al. found greater severity to be associated with lower income, a lower likelihood of having an income above the median, and spending a lower percentage of income on sale items.³⁶ These results suggest that the most severe buying disorders are found in persons with low incomes who have little ability to control or to delay their urges to make inappropriate purchases.

5. Sociocultural issues

Some consumer behavior researchers consider CBD as part of a spectrum of aberrant consumer behavior, which would also include pathological gambling, shoplifting, and credit abuse. Accordingly, as early as 1924 Stekel proposed that compulsive spending was a *forme fruste* of kleptomania. Extravagant expenditures and usage of credit cards have become cultural icons of power and prestige. This link seems particularly strong for compulsive shoppers³⁷ and women may be particularly vulnerable because in a society dominated by men the role of credit as a source of autonomy is underscored for them.

Black has hypothesized that cultural mechanisms are necessary to the development of CBD, as evidenced by the fact that the disorder mainly occurs in developed countries.²³ He has proposed that for CBD to develop, the following elements are needed: the presence of a market-based economy, the availability of a wide variety of goods, disposable income, and significant leisure time.

6. Neurobiology and genetics

Neurobiologic theories have centered on disturbed serotonergic, dopaminergic, or opioid neurotransmission. Selective serotonin reuptake inhibitors (SSRIs) have been used to treat CBD³⁸⁻⁴⁰ in part because investigators have noted similarities between CBD and obsessive-compulsive disorder, a disorder known to respond to SSRIs. Case reports suggesting benefit from the opiate antagonist naltrexone have led to speculation about the role of opiate receptors.⁴¹ While these associations have fueled speculation about the neurotransmitter systems underlying CBD, thus far there are no studies that have directly examined neurotransmitters in CBD, neither through plasma nor cerebral spinal fluid levels.

McElroy et al. reported the first investigation of family history. Of 18 people with CBD, 17 had one or more first-degree relatives with major depression, 3 with an anxiety disorder, 11 with alcohol or substance abuse and 3 with CBD.⁸ Black et al. assessed 137 first-degree relatives of 31 compulsive shoppers; CBD was identified in 13 (9.5%).²⁹ This study also reported that, by comparison with controls, the compulsive shoppers' first-degree relatives reported significantly more depression, alcoholism and drug abuse. However, symptoms of CBD were not assessed in control subjects in this investigation. The small sample sizes constitute important limitations of these studies. Nevertheless, it is noteworthy that in both studies the reported frequencies of CBD among relatives are higher than the reported prevalence indexes in general population.¹⁹ Furthermore, family studies can help clarify the differences and commonalities between groups of disorders.

Two molecular genetic studies of CBD have been published. Comings et al. found a significant correlation between a polymorphism in the promoter region of the D1 receptor gene and the association of Tourette's disorder with gambling, alcohol abuse, and CBD.⁴² Devor et al. were unable to find an association of CBD with the serotonin transporter gene promoter polymorphism.⁴³ However, this investigation was conducted in a small sample that lacked power to detect association for small-effect alleles.

7. Treatment

1) Psychotherapy

There are no standard treatments for CBD, and much of what has been described reflects the theoretical orientation of the writer. There are several case studies regarding the psychoanalytic treatment of compulsive buyers,⁶ each emphasizing the importance of early life experiences. More recently, cognitive-behavioral models have been developed for CBD. Lejoyeux¹⁷ and Bernik¹³ both suggested that cue exposure and response prevention may be helpful. Bernik reported on two patients with comorbid panic disorder and agoraphobia responsive to clomipramine, whose uncontrolled buying did not respond to the drug. Both patients responded well to the 3 to 4 weeks of daily cue exposure and response prevention, though no follow-up data was presented.

Group cognitive-behavioral models have also been developed. Mitchell et al. reported that their model produced significant improvement compared to a wait list in a 12-week pilot study; improvement was maintained during a 6-month follow-up.⁴⁴

2) Psychopharmacology

McElroy et al. reported a total of 23 compulsive buyers treated with antidepressants.^{8,45} On their first report, three subjects with comorbid mood and anxiety disorders had partial or full remission of their excessive buying. On the later report, 9 of 20 patients treated mainly with serotonin reuptake inhibitors experienced partial or full remission. Two of the 9 patients also had supportive psychotherapy before receiving antidepressants. Yet, in a 9-week open trial with fluvoxamine for non-depressed compulsive shoppers, 9 out of 10 patients improved; suggesting that subjects do not need to be depressed to improve with an antidepressant.³⁸

Two randomized-controlled trials have been conducted for CBD, both using fluvoxamine. Ninan et al. reported a 12-week trial with 37 subjects, and found no difference between fluvoxamine and placebo in an intent-to-treat analysis.³⁹ Black et al. studied a sample of 23 non-depressed outpatients with CBD randomly assigned to either fluvoxamine (n = 12) or placebo (n = 11).⁴⁶ At the end of the 9-week trial, 50% of the patients in the fluvoxamine group and 64% of the placebo group were rated as "much" or "very much" improved on the Clinical Global Improvement scale. The high response to placebo underscores the need for further randomized controlled trials with longer periods of follow-up.^{7,23}

Koran et al. reported the results of an open-label trial with citalopram. Seventeen (71%) of 24 patients initially selected reported being very much improved in both specific measures of buying behavior and global functioning. Responders to open-label citalopram were then enrolled in a nine-week randomized placebo controlled trial.⁴⁰ Compulsive shopping symptoms returned in five of eight subjects assigned to placebo compared to with none of the seven who continued taking citalopram. By comparison, escitalopram showed little effect for CBD in an identically designed discontinuation trial by the same investigators.⁴⁷

Grant described cases in which persons with CBD improved with naltrexone, suggesting that opiate antagonists might play a role in the treatment of CBD.⁴¹

3) Other treatments

Other approaches have been described as well. Self-help books are available, and may be helpful. Debtors Anonymous, patterned after Alcoholics Anonymous, may also be helpful. This is a voluntary, lay-run group that provides an atmosphere of mutual support and encouragement for those with substantial debts. Simplicity circles are available in some US cities; these voluntary groups encourage people to adopt a simple lifestyle, and to abandon their CBD. Marriage (or couples) counseling may be helpful, particularly when CBD in one member has disrupted the relationship. Many persons with CBD develop financial difficulties, and may benefit from financial counseling.

Case vignette

The following case illustrates the complexities of treating a patient with CBD.

Simone, a 48 years old single nursing assistant presented for help with her uncontrolled buying. She had a previous history of recurrent major depressive episodes and one suicide attempt, but was not currently depressed. Shame had prevented her from revealing her buying behaviors to her previous clinicians, but her symptoms were consistent with the criteria of McElroy et al.⁸ Simone was never able to save money, and usually spent all her income on clothing and compact discs. Because she lived alone, there was no spouse or partner to help monitor her behavior. However, she agreed to cancel her credit cards and checking account.

In the first week of treatment, while working to control her buying urges, Simone reported feeling irritable with developed cold sweats and jitteriness: "I felt as if I were a drug addict in withdrawal". She was educated about her disorder, made aware of the cues that seemed to provoke her inappropriate shopping behaviors, and given advice about how she could better resist acting on those cues. Weekly psychodynamic psychotherapy was begun. Simone had long resented her mother for giving her up for adoption at age six, following her father's death. She was raised by a foster family, but never felt she was in fact a member of this family. Shortly after treatment began, she located her biological mother and resumed a relationship with her. To her surprise, her mother was also a compulsive shopper. Simone's relationships seemed to reflect the loose emotional connection she had with members from her two families (the original and the foster one). At her fifth therapy session she said: "I can't trust people, but the things I buy can't leave me." When the symbolical replacement of human companion for inanimate objects was revealed, she experienced a strong sense of anguish that led to a binge episode of uncontrolled buying. She had no further buying sprees in the remaining 25 weeks of treatment. She presented depressive symptoms again at the tenth session that responded to fluoxetine 20 mg daily. The patient was then able to renegotiate her debts.

1. A clinical approach to CBD

The case of Simone illustrates many of the issues faced by compulsive shoppers when they seek treatment. While she was not initially prescribed medication, it was clear that she needed to "break" with her excessive shopping (i.e., stimulus control). Psychodynamic therapy was then started to address the processes underlying her uncontrolled shopping, with the goal of allowing Simone to develop new coping skills. Finally, medication was prescribed to address her comorbid major depression.

In this case, the treatment was helpful and Simone was able to get control of her excessive shopping behavior. Because there are no standard therapies, research is needed to determine the role of the different treatment options, and in particular whether psychosocial treatments alone or in combination with medication will produce the best results. Clinicians may wish to consider the following treatment recommendations (which are based mainly on clinical experience):

1) First, a complete psychiatric evaluation is important to rule out a bipolar disorder, and to assess psychiatric comorbidities. At this point, motivational techniques may be useful to yield further intervention;

2) Then, begin with stimulus control so that the patient can settle down and engage in further treatment;

3) Progressive cue exposure and response prevention may help prevent relapses provoked by shopping triggers;

4) Classic CBT approach with cognitive restructuring, skill training, and relapse prevention help stabilizing initial gains;

5) If craving persists anti-craving medication (SSRI, naltrexone) may help;

6) Psychodynamic techniques can consolidate therapeutic gains by exploring underlying conflicts that may have provoked the disorder;

Assessment of patients at risk for CBD (e.g. patients with addictions or other impulse control disorders, depressed women) should prompt inquiries about excessive or uncontrolled shopping and spending. The potential consequences of CBD are sufficiently severe that patients with this condition merit assessment and treatment.

Discussion

 CBD and pathological gambling: are they related? CBD has many commonalities with pathological gambling:
CBD affects mostly young adults and it is likely triggered by the passage into adulthood and having greater access to money; 2) the occurrence of early onset uncontrolled shopping appears related to a "general problem behavior syndrome" as also identified for teenage gambling; 3) many similar personality traits are common to both conditions, particularly impulsivity;12 4) CBD and pathological gambling share similar comorbidity profiles grouped in four major clusters: mood disorders, anxiety disorders, substance use disorders, and other disorders of impulse control;⁵ 5) the fact that compulsive shopping behavior is relatively frequent among pathological gamblers, and vice versa,⁹ is evidence in favor of a relationship; 6) whereas standards for the treatment of CBD have not been established, like pathological gambling the general approach tends to involve cognitive behavioral and psychodynamic therapies, along with psychotropic medication, especially serotonin reuptake inhibitors; 7) both CBD and pathological gambling appear to fit Jacob's theory.48 wherein one becomes dependent upon a substance or behavior when its performance provides relief to a damaged self-identity.

The gender distribution appears to be one of the main differences between the syndromes: with in pathological gambling men predominate, as opposed to women in CBD. One possible explanation is that the expression of a tendency towards behavioral disinhibition and engagement in selfrewarding activities is shaped by society's gender expectations.

2. CBD: impulsive reaction, escape-relief activity, or something else?

CBD and pathological gambling may form part of an impulsive-compulsive spectrum.^{8,16} Along these lines, some regard CBD as a behavioral expression of a personality trait. Depending on the circumstance such traits can express themselves as a healthy leisurely style, or as maladaptive excitement-seeking or as a stress copping strategy. According to this view, symptoms of uncontrolled shopping do not constitute a true comorbidity but rather are markers of impulsivity. Consistent with this view are the results of a factor analytic study by Gerbing et al. which found that items assessing impulsive (i.e., unplanned) shopping were highly correlated to a general impulsivity factor.⁴⁹ Lejoyeux et al., as mentioned, demonstrated that depressed persons with CBD had higher dimensional scores of impulsivity than depressed persons without CBD.12 And, while the relationship of CBD to OCD remains uncertain, evidence favoring a relationship to impulsivity outweighs evidence of a relationship to compulsivity.

The ego-syntonic nature of CBD and its relation to pleasure,¹⁷ in addition to being frequently comorbid with the disorders of impulse control, also suggest that CBD might best fit with this category. These disorders (e.g., pathological gambling, kleptomania, pyromania, trichotillomania) are unified by the fact that they each involve voluntary decisions to engage in generally pleasurable behaviors, often in response to an irresistible urge. Faber observed that these behaviors often become a "primary means of escaping stress or unpleasant situations".⁵⁰ While initially gratifying, the behaviors ultimately begin to interfere with normal life functioning.

3. CBD and the addictions and mood disorders

The similarity to the addictive disorders has already been pointed out.¹⁷ Glatt and Cook described a case of a woman with CBD who reported feeling "high" when purchasing new goods, followed by depression and guilt.¹⁵ These symptoms seem to be consistent with the view of some that compulsive shopping constitutes an "addiction," even though no substance is injected or ingested. Thus, the concept of a "behavioral addiction" is applicable, wherein a behavior (e.g., shopping, gambling, sex) produces the same cascade of problems that substances routinely do. For example, in these situations the behavior becomes increasing important to the person despite adverse consequences, that attempts to control the behavior; that the behavior provides relief from negative affects, and feeling restless or irritable when attempting to cut back.

Other investigators have stressed that CBD occurs in response to mood disorders, mainly depression, and that its treatment is likely to suppress uncontrolled shopping.¹⁷ Evidence in favor of a relationship to the mood disorders include the fact that compulsive shoppers have elevated scores on the Beck Depression Inventory, compared with normal buyers.⁷ While CBD has been associated with negative mood states, and the presence of comorbid CBD and depression appears to identify individuals with more severe psychopathology, it is unlikely that uncontrolled shopping is a maladaptive way to cope with depression, because uncontrolled buying can be observed in the absence of mood symptoms.³⁸

4. Future research

The criteria of McElroy et al. have been widely embraced, yet there have been no efforts to examine their reliability and validity.⁸ Other than the Minnesota Impulsive Disorders Interview there are no accepted structured interviews to diagnose the compulsive shopping and other disorders of impulse control. Work is needed to clarify the role of this and potentially competing instruments, as well as other rating instruments including the CBS and the shopping version of the Yale-Brown Obsessive Compulsive Scale. The prevalence of CBD needs to be studied in additional unbiased samples, and the presence of CBD should be linked to functional assessments so that the extent of its interference with important life domains can be determined. The gender distribution needs to be clarified, as does its true relationship with comorbid psychiatric disorders. For example, does major depression precede the onset of CBD, or vice versa? More work is needed to clarify the interrelationship of CBD, pathological gambling, and other unrestrained behaviors (e.g., compulsive sexual behavior, compulsive computer use) to determine whether there is any validity to the concept of "behavioral addictions". There are no good data on the longitudinal course of CBD, and follow-up studies would help in this regard. Neurobiologic studies, including molecular genetics, brain imaging, neuropsychology and psychophysiologic investigations could all help delineate the process through which one acquires and develops uncontrolled shopping.

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