

Study of Compulsive Buying in Depressed Patients

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Background: Compulsive buying is defined by the presence of repetitive impulsive and excessive buying leading to personal and familial distress. Patients with this disorder also suffer from mood disorder in 50% to 100% of the cases studied, and antidepressants help to decrease the frequency and the severity of uncontrolled buying. To define the correlation between compulsive buying and depression, we assessed this behavior among 119 inpatients answering to DSM-III-R criteria for major depressive episode. Additionally, we evaluated for comorbidity in the patients suffering from compulsive buying and in those free from this disorder. Impulsivity and sensation seeking were also compared in the two groups.

Method: Diagnosis of compulsive buying was made using standardized criteria and a specific rating scale. Diagnosis of depression and assessment of comorbidity were investigated using the Mini International Neuropsychiatric Interview and a modified version of the Minnesota Impulsive Disorders Interview. All patients answered the Zuckerman Sensation-Seeking Scale and the Barrat Impulsivity Rating Scale.

Results: The prevalence of the disorder was 31.9%; 38 of the 119 depressed patients were diagnosed as compulsive buyers. Patients from the compulsive buying group were younger in age, more often women than men, and more frequently unmarried. They presented more often than others with recurrent depression (relative risk = 1.4), disorders associated with deficits in impulse control such as kleptomania (relative risk = 8.5) or bulimia (relative risk = 2.8), benzodiazepine abuse or dependence disorder (relative risk = 4.7), and two or more dependence disorders (relative risk = 1.99). Subscores for experience seeking using the Zuckerman Sensation-Seeking Scale were significantly higher ($p = .04$) and scores of impulsivity were much higher ($p < .0001$) than corresponding scores in the group without compulsive buying behavior.

Conclusion: Compulsive buying is frequent among depressed patients. In most cases, the behavior is associated with other impulse control disorders or dependence disorders and a high level of impulsivity.

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Compulsive buying was first described by Emil Kraepelin¹ and Eugen Bleuler.² Patients, almost always women, were considered as “buying maniacs.” Kraepelin defined buying mania or oniomania as a pathological impulse. Similarly, Bleuler² listed oniomania among the reactive impulses. More recently, other types of impulse control disorders have been included in the DSM-IV. These disorders (intermittent explosive disorder, kleptomania, pyromania, and pathological gambling) share three essential features: failure to resist an impulse, drive, or temptation to perform some act that is harmful for the person or others; increased tension or arousal prior to the act; a sense of pleasure, gratification, or release at the time of committing the act, or shortly thereafter.³

Repetitive compulsive buying, usually named compulsive buying in contemporary literature, may, like pathological gambling or kleptomania, constitute an impulse control disorder and induce significant distress.⁴ To distinguish normal impulsive buying from repetitive compulsive buying leading to social, familial, or work distress, McElroy et al.⁵ proposed diagnostic criteria (Table 1). Christenson et al.⁶ confirmed these criteria and noted that the disorder regularly induces large debts (58.3%), inability to pay debts (41.7%), feedback from acquaintances (33.3%), financial legal consequences (8.3%), criminal legal problems (8.3%), and guilt feelings (45.8%).

The relation between compulsive buying and depression is complex. Patients suffering from compulsive buying, as compared with controls, have lifetime histories of depression that occur statistically significantly more often. McElroy et al.⁵ found, among 20 patients answering to the specific criteria cited above, that 19 patients met DSM-III-R criteria for lifetime diagnosis of a major mood disorder—most commonly bipolar disorder.

METHOD

Table 1. McElroy and Colleagues' Diagnostic Criteria for Compulsive Buying*

- A. Maladaptive preoccupations 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 are experienced as irresistible, intrusive, and/or senseless.
 2. Frequent buying of more than 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.

*From reference 5, with permission.

The onset of mood disorder preceded the onset of compulsive buying by at least 1 year in 14 patients, and occurred at least 1 year after the onset of overbuying in 6 patients. Compulsive buying may thus be triggered or directly induced by depression.

McElroy et al.⁵ noted that 70% of the patients presenting with compulsive buying described buying as "a high," "a buzz," "a rush." For most patients, buying typically increases during mildly to moderately severe depressive episodes and decreases during hypomanic, manic, and severe depressive episodes. Patients reported that, when depressed, only shopping made them feel good.⁶ The purchasing behavior increases positive interactions with salespeople, the motivation for buying stemming more from an attempt to attain positive interpersonal and self-esteem goals than from a desire to possess things.⁷ Items compulsively bought are often used to enhance both others' and one's own image of self. The choice of items related to seduction or well-being is especially frequent when compulsive buying is associated with depression. Thus, rarely are articles bought because they are needed or are advantageously priced, or out of an intrinsic desire for the item itself. In addition, the effectiveness of antidepressants on this behavior has stimulated discussion as to whether compulsive buying, like other impulse control disorders, might be an "affective spectrum disorder."⁸

No author has assessed the prevalence of compulsive buying in depressed patients. We thus evaluated the prevalence of compulsive buying among 119 patients hospitalized for depression. We also studied sociodemographic and clinical characteristics of depressed patients presenting compulsive buying, as compared to patients presenting depression without compulsive buying. Since compulsive buying has been related to the impulse control disorders, we also assessed levels of impulsivity and sensation seeking. We compared these levels in depressed patients with and without compulsive buying.

The most difficult methodological issue in studying compulsive buying is the use of relevant diagnostic criteria. To select patients presenting true repetitive compulsive buying and not merely episodic impulsive buying, we used two clinical instruments: the McElroy et al. criteria⁵ and a specific questionnaire⁹ (Appendix 1). This questionnaire was especially designed for the assessment of compulsive buying among psychiatric patients. It allows for the assessment of the behavior itself and its consequences. As the questionnaire was focused on buying impulses, it did not study general spending behavior. Nineteen items (questions with yes or no answers) represented major basic features of compulsive buying. These dimensions were impulsivity; urges to shop and buy; emotions typically felt before, during, and after purchasing; postpurchase guilt and regret; degree of engagement of short-term gratification; tangible consequences of buying; and avoidance strategies.

All patients included in the compulsive buying group met McElroy et al. criteria⁵; each patient positive for compulsive buying presented repetitive and impulsive buying behavior, euphoria or excitation before purchasing, postpurchase guilt, and real negative consequences of buying. These features were assessed with our specific questionnaire⁹ (Appendix 1).

Diagnosis of depression was determined by two separate clinical evaluations. All patients met DSM-III-R criteria for major depression without psychotic symptoms. Diagnoses were confirmed with the Mini International Neuropsychiatric Interview (MINI).¹⁰ Diagnosis of drug, alcohol, and benzodiazepine dependence disorder and of bulimia were based on DSM-IV criteria using the MINI. Diagnosis of impulse control disorders (pyromania, kleptomania, trichotillomania, intermittent explosive disorder, and pathological gambling) were based on DSM-III-R criteria and a modified version of the Minnesota Impulsive Disorders Interview.⁶ Finally, all patients completed the Zuckerman Sensation-Seeking Scale,¹¹ the Barrat Impulsivity Rating Scale,^{12,13} and a questionnaire on suicide attempt history. As all of our patients were French speakers, we used a French-language translation of the Sensation-Seeking Scale.¹⁴ This 72-item scale measures five features: general factor, thrill and adventure seeking, experience seeking, disinhibition, and boredom susceptibility. The Barrat Scale assesses for "non-planning" activity, cognitive impulsivity, motor impulsivity, and total score.

We included all consecutive patients admitted to the psychiatric unit for the treatment of depression between January and December 1995. The unit has an urban location. Because we did not select the patients, the population of the study strictly reflected a cross-section of individuals hospitalized for depression. The assessment was

Table 2. Sociodemographic and Clinical Characteristics of Depressed Patients With (CB+) or Without (CB-) Compulsive Buying

Characteristic	CB+ (N = 38)	CB- (N = 81)	Statistics ^a	
			Relative Risk	p Value
Age (mean ± SD)	39.76 ± 13.32	47.29 ± 12.78		.003 ^{b,c}
Sex ratio (women/men)	8.6	2.5		.05 ^c
Married, N (%)	18 (47)	50 (62)		.1
Recurrent depression, N (%)	29 (76)	44 (54)	1.40	.016 ^c
Bipolar disorder, N (%)	4 (10)	20 (24)	0.42	.05 ^c
Bulimia, N (%)	8 (21)	6 (7)	2.85	.03 ^c
Kleptomania, N (%)	4 (10)	1 (1)	8.52	.03 ^c
Benzodiazepine abuse/dependence, N (%)	11 (29)	5 (6)	4.68	.001 ^c
Alcohol abuse/dependence, N (%)	14 (37)	18 (22)	1.65	.07
Nicotine dependence, N (%)	21 (55)	34 (42)	1.31	.12
All dependence disorders, N (%)	27 (71)	42 (52)	1.99	.03 ^c
Two or more dependence disorders, N (%)	15 (39)	16 (20)	1.99	.02 ^c
Repeated suicide attempts, N (%)	20 (53)	27 (33)	1.50	.03 ^c

^ap Value determined by Fisher's exact test for all variables except age.^bAge: Student's *t* = 2.957, *df* = 117.^cDifference is statistically significant.**Table 3. Sensation Seeking and Impulsivity in Depressed Patients With (CB+) or Without (CB-) Compulsive Buying (Mean Scores, Statistics)**

Feature	CB+ (N = 38)	CB- (N = 81)	Student's <i>t</i> (<i>df</i> = 117)	
			<i>t</i>	p Value
Sensation seeking ^a				
General factor	5.0	4.4	0.7	.2
Thrill and adventure seeking	4.1	3.7	0.806	.2
Disinhibition	2.7	2.6	0.217	.4
Boredom susceptibility	3.2	3.2	0.07	.4
Experience seeking	4.4	3.5	1.687	.04 ^c
Impulsivity ^b				
Total score	65.0	50.1	5.267	< .0001 ^c
Non-planning activity	19.6	16.7	1.96	.02 ^c
Cognitive impulsivity	23.4	18.5	4.108	< .0001 ^c
Motor impulsivity	21.9	14.7	5.54	< .0001 ^c

^aZuckerman Sensation-Seeking Scale.^bBarrat Impulsivity Rating Scale.^cDifference is statistically significant.

made for all patients during the first week of hospitalization. The 119 patients (28 men and 91 women) were all free from somatic illness. Sixty-eight (57%) were married, and 51 (43%) were single (unmarried, divorced, separated, or widowed).

Comparison between depressed patients presenting with and without compulsive buying was made with unpaired *t* tests. For nonparametric data, differences in proportions were compared with Fisher's exact test.

RESULTS (TABLE 2)

Thirty-eight of the 119 depressed patients were diagnosed as compulsive buyers. The compulsive buying group was significantly younger and more often female than the non-compulsive buying group, and there was a trend for members of the compulsive buying group to be more likely to be single (see Table 2). All compulsive buyers described themselves as having experienced irresistible urges, uncontrollable needs, or mounting tension that

could be relieved only by buying. For all compulsive buyers, compulsive buying had tangible negative consequences. Postpurchase guilt was present in 21 patients (55%); 24 compulsive buyers (63%) described attempts to resist the urge to buy.

All patients fulfilled DSM-III-R criteria for major depressive episode. Recurrent depression was more frequent and bipolar mood disorder less frequent in the compulsive buying group. Bulimia, kleptomania, and benzodiazepine and alcohol abuse or dependence disorders were more frequent in the compulsive buying group. Dependence on nicotine was equally frequent in both groups. Globally, patients from the compulsive buying group presented more often with alcohol, benzodiazepine, or nicotine dependence (71% vs. 52%). Patients from the compulsive buying group presented significantly more often with two or more dependency disorders (dependence on alcohol and benzodiazepine) than patients from the group without compulsive buying. We also noted that repeated suicide attempts (more than two

suicide attempts in 3 years) were more frequent in the compulsive buying group.

Sensation Seeking and Impulsivity (Table 3)

The 72-item Zuckerman Sensation-Seeking Scale allowed us to compare patients from the two groups (with and without compulsive buying). Mean scores of general factor (5.0 and 4.4, respectively), thrill and adventure seeking (4.1 and 3.7), and disinhibition (2.7 and 2.6) were slightly higher in the compulsive buying group, but the differences were not statistically significant. Mean scores for boredom susceptibility were equal in the two groups. The only significant difference was found in the score for experience seeking, which was significantly higher in the compulsive buying group than in the non-compulsive buying group ($p = .04$). Impulsivity scores assessed with the Barrat Scale were higher in the compulsive buying group, and the difference was highly significant ($p < .0001$).

DISCUSSION

This study, the first to assess the prevalence of compulsive buying in depressed patients, found a frequency of 32% of this behavior in our population. We also noted that depressed patients with compulsive buying were younger in age, more often women than men, and more frequently unmarried. They presented more often than other depressed patients with disorders associated with deficits in impulse control (e.g., kleptomania, bulimia). This result could support the hypothesis that compulsive buying may be included, like kleptomania, in the spectrum of impulse control disorders.³ Compulsive buying is also associated with benzodiazepine or alcohol abuse/dependence. Patients from the compulsive buying group were significantly more exposed to the risk of benzodiazepine dependence and of multiple addiction. These results could support the hypothesis that compulsive buying may be understood as a "non-chemical" addiction. Marks¹⁵ underlined that compulsive buying shares many features with those of substance abuse/dependence. He listed patterns common to compulsive buying and other addictions: urge to engage in a counterproductive behavioral sequence (i.e., craving), mounting tension unless the sequence is completed; rapid but temporary tension release when the sequence is completed; return of the urge and tension over hours, days, or weeks (i.e., withdrawal symptoms); external cues unique to a given addiction syndrome; secondary conditioning by external and internal cues (dysphoria, boredom); hedonic tone in early stage of addiction.

From a psychopathological point of view, compulsive buying in depressed patients was significantly associated with impulsivity and less significantly with sensation seeking. The only score of Zuckerman's Sensation-Seeking Scale that appeared to be different in the two groups

was the score for experience seeking. Patients characterized by high levels of sensation seeking, and experience seeking could fight against depression and anhedonia with compulsive buying in a compensatory process.¹⁶

The fact that scores for impulsivity were significantly higher in the compulsive buying group stresses the impulsive nature of this kind of buying. Compulsive buying is most often determined by a strong, sometimes irresistible urge and a sudden propensity to act. Once triggered, the impulse encourages immediate action, and it may be powerful and persistent.⁵ The high frequency of compulsive buying in our population of depressed patients stresses the link between depressive affects and "compensatory buying." The main link between compulsive buying and depression could be low self-esteem. Previous studies demonstrated that compulsive buyers regularly show a significantly lower mean score of self-esteem than normal consumers and a highly significant negative relationship between addictive buying and self-esteem ($r = -.24$; $p = .0013$).¹⁷

We have previously reported¹⁸ cases of compulsive buying in depressed inpatients that disappeared when the patient was no longer depressed. Compulsive buying was present only during the depressive episode. Compulsive buying was thus directly induced by depression. The link between compulsive buying and depression is also confirmed by the effect of antidepressants on this behavior. McElroy et al.¹⁹ described compulsive buying in three patients who were not depressed, which improved under antidepressant treatment. All patients reported decreases in the intensity and frequency of shopping urges and reduced shopping within 1 to 4 weeks of treatment with doses of antidepressants effective in major depression. Antidepressants¹⁹ could act through a specific effect on compulsive shopping or through a positive effect on mood disorder. Of 13 patients receiving treatment (antidepressants alone or in conjunction with mood stabilizers) while symptomatic, 9 (69%) described a complete or partial remission in buying urges and behavior. However, several of these drug treatments were terminated after a brief period of time because of intolerance to side effects ($N = 2$) or induction of hypomania ($N = 1$).

CONCLUSION

The occurrence of compulsive buying in patients who have a mood disorder is not only related to a manic state. Compulsive buying, defined as repetitive and impulsive buying behavior leading to personal and familial distress, is present in 31.9% of the patients. Depressed patients suffering from associated compulsive buying were younger, more often women, and unmarried. They presented significantly more often than other depressed patients with bulimia and kleptomania in association with their mood disorder.

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Appendix 1. Questionnaire About Buying Behavior*

Directions: Each of the items below contains two choices, yes or no. Please indicate on your answer sheet which choice most describes the way you act and feel. Do not leave any blanks and please respond to all questions with only one answer (yes or no).

1. Have you ever had the irresistible urge to spend money on any thing at all?
2. Have you ever bought something that you later found useless?
3. Have you ever felt on edge, agitated, or irritable when you haven't been able to buy something?
4. Have you ever avoided certain stores because you were afraid you would buy too much?
5. Have you ever asked someone to go shopping with you so you wouldn't buy too much?
6. Have you ever hid your purchases from your family or friends?
7. Has the craving to buy something ever caused you to miss a date with friends?
8. Have you ever left work in order to buy something?
9. Has one or several of your purchases ever provoked the reproach of your family or friends?
10. Has one or several of your purchases ever provoked a prolonged misunderstanding or separation?
11. Has any of your purchases ever resulted in problems with your bank?
12. Has any of your purchases ever resulted in legal problems?
13. Have you ever continued to buy things in spite of the financial and family problems your purchases caused?
14. Do you regularly regret your purchases?
15. Do you regularly feel tense or nervous before you buy something?
16. Do you regularly feel relieved after you've bought something?
17. Do you have excessive buying periods accompanied by overwhelming feelings of generosity?
18. Do you buy something "on the spur of the moment" at least once a month?
19. Do your "spur of the moment" or excessive purchases represent at least 25% of your wages?

*From reference 9, with permission.