

Understanding and Treating Kleptomania: New Models and New Treatments

Jon E. Grant, JD, MD, MPH

Department of Psychiatry, University of Minnesota School of Medicine, Minneapolis, Minnesota, U.S.A.

Abstract: Kleptomania, characterized by repetitive, uncontrollable stealing of items not needed for personal use, is a disabling disorder that often goes unrecognized in clinical practice. Although originally conceptualized as an obsessive-compulsive spectrum disorder, emerging evidence (clinical characteristics, familial transmission, and treatment response) suggests that kleptomania may have important similarities to both addictive and mood disorders. In particular, kleptomania frequently co-occurs with substance use disorders, and it is common for individuals with kleptomania to have first-degree relatives who suffer from a substance use disorder. Additionally, there is some suggestion that selective serotonin reuptake inhibitors, the treatment of choice for obsessive-compulsive disorder, may lack efficacy for kleptomania. Instead, other medications (lithium, anti-epileptics, and opioid antagonists) have shown early promise in treating kleptomania. Evidence suggests that there may be subtypes of kleptomania that are more like OCD, whereas others have more similarities to addictive and mood disorders. Subtyping of individuals with kleptomania may be a useful way to better understand this behavior and decide on effective treatment interventions.

Introduction

Although shoplifting dates back centuries, the idea that some people may not be able to control their stealing was first seriously examined in 1838 (1). At that time, two French physicians, Jean-Etienne Esquirol and C.C. Marc coined the term "kleptomanie" to describe shoplifting characterized as involuntary and irresistible (1). Since that time, only episodic mention is made of kleptomania in the scientific literature. In 1952, the first Diagnostic and Statistical Manual of Mental Disorders (DSM-I) included kleptomania as a supplementary term rather than as a distinct diagnosis, but kleptomania was then left out altogether in DSM-II (1968). Since its reappearance in DSM-III (1980), it has been categorized as an impulse-control disorder not elsewhere classified, and remains this way in the current DSM-IV-TR (2000) (2).

Kleptomania is defined by the following diagnostic criteria: 1) recurrent failure to resist impulses to steal objects that are not needed for personal use or for their monetary value; 2) increasing sense of tension immediately before committing the theft; 3) pleasure, gratification, or relief at the time of committing the theft; 4) the stealing is not committed to express anger or vengeance and is not in response

to a delusion or a hallucination; and 5) the stealing is not better accounted for by conduct disorder, a manic episode, or antisocial personality disorder (2).

Although no national epidemiological study of kleptomania has been performed, studies of kleptomania in various clinical samples suggest a high prevalence for the disorder which may represent a public health concern. A recent study of psychiatric inpatients with multiple disorders (n=204) revealed that 7.8% (n=16) endorsed current symptoms consistent with a diagnosis of kleptomania and 9.3% (n=19) had a lifetime diagnosis of kleptomania (3). This finding suggests that kleptomania among psychiatric patients is fairly common. Also, because the lifetime and current prevalence rates were nearly identical, this suggests that the disorder is most likely chronic if left untreated. These findings are supported by prior studies. One study examining 107 patients with depression found that 4 (3.7%) suffered from kleptomania (4). In a study of 79 patients with alcohol dependence, 3 (3.8%) also reported symptoms consistent with kleptomania (5). In two separate studies examining comorbidity in pathological gamblers, rates of comorbid kleptomania were found ranging from 2.1% to 5% (6, 7).

Address for Correspondence: Jon E. Grant, JD, MD, Department of Psychiatry, University of Minnesota School of Medicine, 2450 Riverside Avenue, Minneapolis, MN 55454, U.S.A. E-mail: grant045@umn.edu

Clinical Characteristics

Individuals with kleptomania report that the objects stolen usually are of little value and affordable. After stealing the items, the individual will then typically discard, hoard, secretly return, or give them away (8). Individuals may avoid stealing when immediate arrest is likely, but the chances of apprehension are usually not fully taken into account. Although a sense of pleasure, gratification or relief is experienced at the time of the theft, individuals will describe a feeling of guilt, remorse or depression soon afterwards (9).

Of the four studies that have assembled large numbers of patients with kleptomania ($n=108$), 68 (63.0%) were female (9-12). Although the majority of reported cases of kleptomania indicate a female predominance, these findings may be biased as women may be more likely than men to present for psychiatric evaluation. Also, the legal system may be more likely to send female shoplifters for psychiatric evaluation while sending male shoplifters to prison (9).

The average age at onset of stealing behavior is typically during adolescence, although there are reports of new onset stealing behaviors occurring as early as 4 years of age (13) and as late as 77 years of age (14). The mean age at time of evaluation is typically mid- to late-30s. Women usually present for evaluation at a younger age than men. For example, one study reported that the average age for women at time of evaluation was 35 years of age, while for men it was 50 years of age (8). The length of time between age of onset and age at evaluation reinforces the guilt, shame and secrecy involved in this disorder.

The vast majority of individuals with kleptomania steal from stores. In one study, 68.2% of individuals reported that the value of stolen items had increased over the duration of the disorder suggesting tolerance (9). Most individuals with kleptomania try unsuccessfully to stop stealing. The inability to stop the behavior often leads to feelings of shame and guilt (15). Of married subjects, less than half (41.7%) had told their spouses about their behavior due to the shame and guilt (15). Many individuals with kleptomania (64% to 87%) have been apprehended at some time due to their stealing behavior (11, 12),

with a smaller percentage (15% to 23%) having been jailed (15).

Kleptomania is Not Ordinary Shoplifting

Individuals with kleptomania differ from "ordinary" shoplifters in that they do not steal for personal gain, but rather for symptomatic relief (12). The exact prevalence of shoplifting is unknown (as many who steal are never caught), but it is estimated that more than \$10 billion worth of goods are stolen from retailers each year (16). The vast majority of shoplifters are described as amateurs with sporadic activity, with no known history of criminal activity, and who steal for their own consumption rather than for resale. Rates of kleptomania among people who are arrested for shoplifting have ranged from 0 to 8% (12). According to the DSM-IV-TR, fewer than 5% of shoplifters are identified as kleptomaniacs (2). Again, these rates may be falsely low due to incomplete psychiatric evaluations, lack of strict diagnostic criteria for kleptomania, and selection bias in these samples (12).

A study that compared kleptomaniacs to shoplifters interviewed directly after apprehension found that 58% of the shoplifters were male compared to only 32.4% of kleptomania patients (17). The mean age among shoplifters was 27 years and among the kleptomaniacs, 41 years. Although none of the shoplifters met DSM criteria for kleptomania, approximately one-fifth had not stolen for personal use and had eventually discarded the object (17). The study also found that both groups reported the same degree of impulsivity and "a feeling of not being oneself." On the other hand, kleptomaniacs reported a relatively greater number of previous thefts compared to shoplifters, which supports the compulsive aspect of kleptomania.

Characterization of Kleptomania

Approximately ten years ago, researchers suggested that one way to understand an impulse control disorder, such as kleptomania, was as part of an obsessive compulsive spectrum (18). This conceptualization of kleptomania was based on what was then known about the clinical characteristics of the disorder, familial transmission, and response to both pharma-

cological and psychosocial treatment interventions. Over the last five years, there has been a dramatic increase in research concerning kleptomania (19). What has emerged from this research is a more detailed understanding of kleptomania and a complex picture of its relationship to obsessive compulsive disorder (OCD). In addition, other models for understanding kleptomania have been suggested and research suggests that the behaviors diagnosed as kleptomania may be far more heterogeneous than initially thought.

Clinical and Scientific Relationship of Kleptomania to OCD

Kleptomania is characterized by a repetitive behavior and impaired inhibition. The irresistible and uncontrollable shoplifting characteristic of kleptomania suggests a similarity to the frequently excessive, unnecessary and unwanted rituals of OCD. Additionally, individuals with kleptomania frequently report hoarding symptoms that resemble individuals with OCD (9).

There are, however, some clear differences between kleptomania and OCD. For example, people with kleptomania may report an urge or craving state prior to engaging in the problematic behavior and a hedonic quality during the performance of the behavior (19). Individuals with OCD are also generally harm avoidant with a compulsive risk-aversive endpoint to their behaviors (18), whereas individuals with impulse control disorders are generally sensation-seeking (20).

Co-occurrence of Kleptomania and OCD

To demonstrate that a relationship exists between kleptomania and OCD, there should be evidence either that OCD is overrepresented in patients with kleptomania and/or that kleptomania is overrepresented in patients with OCD. Studies examining rates of OCD in subjects with kleptomania have reported inconsistent results, with some showing relatively high rates of co-occurrence of kleptomania with OCD (45%-60%) (11, 12), and others demonstrating low rates (0%-6.5%) (21, 22). When rates of kleptomania have been examined in subjects with OCD, relatively low co-occurrence has been found (2.2%-5.9%) (23, 24).

Family History

A relationship between kleptomania and OCD may also be shown by demonstrating that OCD is common in relatives of subjects with kleptomania. Family history studies of kleptomania subjects are, however, limited. Two uncontrolled studies found that 7% to 25% of family members of individuals with kleptomania may suffer from OCD (11, 12). In the only study that used a control group, however, no significant differences were found in rates of OCD among first-degree relatives of kleptomania subjects compared to controls (22).

Neurobiology

Although pathogenesis is arguably the most valid indicator of whether disorders are related, there has only been a sparse amount of research on possible neurobiological correlates of kleptomania. In a study of the platelet serotonin transporter, similar dysfunction was seen in subjects with kleptomania compared to individuals with OCD (25). Other hints about the possible neurobiology of kleptomania come from case reports. One case report found that damage to orbitofrontal-subcortical circuits may result in kleptomania (26). A second case found kleptomania resulted from head trauma and a left temporal lobe perfusion deficit (27). Additionally, a recent study examining frontal lobe white matter microstructure found that subjects with kleptomania had significantly decreased white matter integrity in inferior frontal regions and therefore reflect impaired connectivity in the tracts running from the limbic region to the thalamus and to the prefrontal region (28).

Additionally, response to pharmacological intervention may also inform us about possible underlying biological mechanism of kleptomania. Originally there was a suggestion that kleptomania, like OCD, may demonstrate a preferential response to serotonin reuptake inhibitors (SRIs). Data from case reports, however, have been inconclusive, with some cases suggesting that kleptomania responds to serotonergic medications and others failing to support this hypothesis (19).

Reasons for the possible shortcomings of the obsessive compulsive spectrum model as it pertains to kleptomania may be due to the heterogeneity of

kleptomania. Perhaps only some individuals with kleptomania share common features with OCD. Conceptualizing all individuals with kleptomania as similar may be too broad. Additionally, there may be subtypes of kleptomania that are more like OCD, whereas other kleptomania subtypes have more in common with addictive or mood disorders.

Other Models for Kleptomania

Behavioral Addiction Model

The model of kleptomania as a behavioral addiction has strong support from recent research. Kleptomania shares certain distinct features with substance use disorders (SUDs): 1) an urge to engage in a behavior with negative consequences; 2) mounting tension unless the behavior is completed; 3) rapid but temporary reduction of the urge after completion of the behavior; 4) return of the urge over hours, days or weeks; 5) external cues unique to the behavior; 6) secondary conditioning by external and internal cues (dysphoria, boredom) and 7) hedonic feeling early in the addiction (29).

Kleptomania frequently co-occurs with SUDs. Lifetime rates of SUDs range from 29% to 50% (12, 22). It is also common for individuals with kleptomania to have first-degree relatives who suffer from SUDs (19).

Kleptomania has also demonstrated response to naltrexone, an opioid antagonist that is FDA approved for opiate and alcohol use disorders (19, 30). Naltrexone has not been shown effective in OCD. The finding that kleptomania may be responsive to anti-addiction medications may support the inclusion of kleptomania within an addictive spectrum.

Affective Spectrum Model

Elevated rates of mood disorders also co-occur in kleptomania. Lifetime rates of mood disorders have ranged from 45% to 100% (11, 12). Individuals with kleptomania often report that their symptoms worsen when they are depressed. Shoplifting may have an antidepressant effect (31). Additionally, because of the elevated rates of co-occurring bipolar disorder found in some studies (12), kleptomania may also be a symptom of subclinical hypomania or mania.

Attention Deficit Hyperactivity Model

The attention deficit hyperactivity disorder (ADHD) model for impulse control disorders is just beginning to generate research attention. The main symptoms of ADHD in adults are impulsiveness and inattention (2). One study found that 15% of individuals with kleptomania have met criteria for ADHD in their lifetime (11). No confirmatory studies of the possible clinical relationship of ADHD to kleptomania have been published. Anecdotal reports of the use of ADHD medications in the treatment of a subset of individuals with kleptomania who appear to have inattentive, impulsive drive to shoplift support the hypothesis that a subset of individuals with kleptomania may be functionally related to ADHD.

Treatment

Pharmacological Treatment

Because kleptomania was originally conceptualized as a form of OCD, the initial pharmacological approach used serotonin reuptake inhibitors (SSRIs). Case reports suggest that SSRIs may have some efficacy in treating kleptomania. Fluoxetine, fluvoxamine and paroxetine have all been used as monotherapy to treat kleptomania (12, 19). The findings from case reports, however, have not been consistent. In fact, seven cases of fluoxetine failed to reduce kleptomania symptoms (12). Additionally, some evidence suggests that SSRIs may actually induce kleptomania symptoms (32). There have been no published open-label or double-blind studies of SSRIs in the treatment of kleptomania.

In addition to SSRIs, case reports also suggest that lithium, valproate and topiramate may be beneficial (19, 33). However, two cases of lithium as monotherapy and two cases of lithium augmentation resulted in no improvement in kleptomania symptoms (12). No controlled studies using a mood stabilizer in kleptomania have been published.

Because of the possible relationship of kleptomania to addictive disorders, studies of kleptomania have examined the efficacy of opioid antagonists in the treatment of kleptomania. Opioid antagonists are hypothesized to work indirectly on dopamine and thereby affect the subjective experience of pleasure and urges seen in kleptomania (15).

Dannon et al. reported two patients suffering from kleptomania who responded to naltrexone. Treated naturally in an outpatient setting, one patient received 50mg/day of naltrexone and the other received 100mg/day. Within one to three weeks, both patients reported kleptomania symptom remission, particularly remission of urges to steal (30). Another case report of adolescent kleptomania demonstrated that naltrexone 50mg/d was effective in reducing the intrusive urges to steal (34).

There has been only one open-label trial of medication for kleptomania. In a 12-week, open-label study of 13 subjects self-referred with kleptomania, naltrexone resulted in a significant decline in the intensity of urges to steal, stealing thoughts and stealing behavior (15). The mean dose of naltrexone for effectiveness was 148 mg/d. Similarly, a 3-year naturalistic follow-up study of kleptomania patients found that of 15 patients treated with naltrexone as monotherapy, 7 (46.7%) achieved a clinically significant reduction in kleptomania symptoms (35).

Possible Treatment Algorithm

In summary, pharmacological research has resulted in a complex picture for clinicians treating kleptomania. The complexity of pharmacological treatment is due both to the small number of cases reported and to the heterogeneity of kleptomania. Treatment should begin with understanding the particular subtype of kleptomania. For those kleptomania subjects with significant mood symptoms who may shoplift due to subsyndromal mania or depression, mood stabilizers or antidepressants may be helpful. For kleptomania subjects who have cravings to shoplift and/or a family history of substance use disorders, the opioid antagonist naltrexone may reduce kleptomania symptoms. When kleptomania symptoms appear to be associated with the general impulsivity of ADHD, stimulants may be beneficial.

Psychosocial Interventions

Psychoanalytic and psychodynamic psychotherapy were the treatments of choice for many decades. The efficacy of this treatment modality, however, is unknown due to lack of controlled studies. Case reports reveal that some patients responded well to this type of therapy, sometimes in conjunction with medica-

tions, while others showed no improvement despite years of therapy (12).

Cognitive-behavioral therapy (CBT) has largely replaced psychoanalytic and psychodynamic psychotherapies in the treatment of kleptomania. Several strategies used in kleptomania include the following: covert sensitization (i.e., the patient is instructed to imagine herself stealing and then to imagine a negative outcome such as being caught or feeling nauseous or short of breath), aversion therapy (i.e., aversive breath-holding until mildly painful whenever an urge to steal or an image of it is experienced), and systematic desensitization (i.e., helping the patient achieve a relaxed state through progressive muscle relaxation and asking the patient to imagine the different steps of the stealing episode, while suggesting that he could better control the urge to steal by controlling the anxiety) (19, 36). CBT suffers from a lack of controlled studies, but case reports reveal that some patients respond well to this, especially in conjunction with medication.

In summary, the effectiveness of psychosocial interventions appears promising for the treatment of kleptomania. Cognitive behavioral therapy, or forms of cognitive and behavioral therapies, are promising for kleptomania, but large scale studies with control groups are lacking. Additionally, there may be a lack of clinicians skilled in these therapies for kleptomania and there are currently no published manualized treatments.

Future Directions

The first and most important step to treating a disorder is to diagnose it properly. Many people are ashamed of the problematic behaviors associated with kleptomania and therefore may not self-report. Clinicians need to screen for shoplifting behavior if this disorder is to be treated properly.

Although kleptomania has some commonality with OCD, there are also important differences and these differences may necessitate different treatment strategies. Many people with kleptomania have co-occurring substance use disorders and these co-occurring conditions need to be addressed as they may both influence kleptomania and interfere with treatment.

Subtyping of kleptomania based on clinical similarities to other disorders (e.g., ADHD), existence of

co-occurring conditions (e.g., bipolar disorder), or due to core features of the behavior (e.g., cravings), may all be useful ways to decide on treatment interventions. Although subtyping of kleptomania needs more research, the early studies suggest that looking beyond the DSM diagnostic criteria and examining what maintains the kleptomania behavior may be clinically helpful.

Conclusions

Kleptomania has historically received relatively little attention from clinicians and researchers. As a consequence, our understanding of efficacious and well-tolerated treatment interventions for kleptomania lags significantly behind those for other major neuropsychiatric disorders. Early evidence suggests that kleptomania frequently responds to both pharmacological and psychosocial interventions. More definitive treatment recommendations await completion of additional, large-scale controlled treatment studies for these disorders and comparative studies of pharmacological agents with psychosocial interventions. Advances in these areas hold the potential for significantly improving the lives of individuals with kleptomania.

References

1. Abelson ES. When ladies go a-thieving: Middle-class shoplifters in the Victorian department store. New York: Oxford University, 1989: pp. 173–196.
2. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Text Revision. Washington, DC: American Psychiatric Association, 2000.
3. Grant JE, Levine L, Kim D, Potenza MN. Impulse control disorders in adult psychiatric inpatients. *Am J Psychiatry* 2005;162:2184–2188.
4. Lejoyeux M, Arbaretaz M, McLoughlin M, Ades J. Impulse control disorders and depression. *J Nerv Ment Dis* 2002;190:310–314.
5. Lejoyeux M, Feuche N, Loi S, Solomon J, Ades J. Study of impulse-control disorders among alcohol-dependent patients. *J Clin Psychiatry* 1999;60:302–305.
6. Grant JE, Kim SW. Comorbidity of impulse control disorders in pathological gamblers. *Acta Psychiatr Scand* 2003;108:207–213.
7. Specker SM, Carlson GA, Christenson GA, Marcotte M. Impulse control disorders and attention deficit disorder in pathological gamblers. *Ann Clin Psychiatry* 1995;7:175–179.
8. Goldman M. Kleptomania: Making sense of the nonsensical. *Am J Psychiatry* 1991;148:986–996.
9. Grant JE, Kim SW. Clinical characteristics and associated psychopathology in 22 patients with kleptomania. *Compr Psychiatry* 2002;43:378–384.
10. Sarasalo E, Bergman B, Toth J. Personality traits and psychiatric and somatic morbidity among kleptomaniacs. *Acta Psychiatr Scand* 1996;94:358–364.
11. Presta S, Marazziti D, Dell'Osso L, Pfanner C, Pallanti S, Cassano GB. Kleptomania: Clinical features and comorbidity in an Italian sample. *Compr Psychiatry* 2002;43:7–12.
12. McElroy SL, Pope HG, Hudson JI, Keck PE, Jr., White KL. Kleptomania: A report of 20 cases. *Am J Psychiatry* 1991;148:652–657.
13. Phelan J. Childhood kleptomania: Two clinical case studies with implications for further research. *Psychology and Education — An Interdisciplinary Journal* 2002;39:19–21.
14. McNeilly D, Burke W. Stealing lately: A case of late-onset kleptomania. *Int J Geriatr Psychiatry* 1998;13:116–121.
15. Grant JE, Kim SW. An open-label study of naltrexone in the treatment of kleptomania. *J Clin Psychiatry* 2002;63:349–355.
16. <http://shopliftingprevention.org/main.asp>
17. Sarasalo E, Bergman B, Toth J. Theft behavior and its consequences among kleptomaniacs and shoplifters — a comparative study. *Forensic Sci Int* 1997;86:193–205.
18. Hollander E. Obsessive-compulsive spectrum disorders: An overview. *Psychiatr Ann* 1993;23:355–358.
19. Grant JE, Potenza MN. Impulse control disorders: Clinical characteristics and pharmacological management. *Ann Clin Psychiatry* 2004;16:27–34.
20. Grant JE, Kim SW. Temperament and early environmental influences in kleptomania. *Compr Psychiatry* 2002;43:223–228.
21. Bayle FJ, Caci H, Millet B, Richa J, Olie JP. Psychopathology and comorbidity of psychiatric disorders in patients with kleptomania. *Am J Psychiatry* 2003;160:1509–1513.
22. Grant JE. Family history and psychiatric comorbidity in persons with kleptomania. *Compr Psychiatry* 2003;44:437–441.
23. Fontenelle LF, Mendlowicz MV, Versiani M. Impulse control disorders in patients with obsessive-compulsive disorder. *Psychiatr Clin Neurosci* 2005;59:30–37.

24. Matsunaga H, Kiriike N, Matsui T, Oya K, Okino K, Stein DJ. Impulsive disorders in Japanese adult patients with obsessive-compulsive disorder. *Compr Psychiatry* 2005;46:43-49.
25. Marazziti D, Mungai F, Giannotti D, et al. Kleptomania in impulse control disorders, obsessive-compulsive disorder, and bipolar spectrum disorder: Clinical and therapeutic implications. *Current Psychiatry Reports* 2003;5:36-40.
26. Nyffeler T, Regard M. Kleptomania in a patient with a right frontolimbic lesion. *Neuropsychiatr Neuropsychol Behav Neurol* 2001;14:73-76.
27. Aizer A, Lowengrub K, Dannon PN. Kleptomania after head trauma: Two case reports and combination treatment strategies. *Clin Neuropharmacol* 2004;27:211-215.
28. Grant JE, Correia S, Brennan-Krohn T. White matter integrity in kleptomania: A pilot study. *Scientific Abstracts, American College of Neuropsychopharmacology 44th Annual Meeting*. Kona, Hawaii: ACNP, 2005 [abstract].
29. Marks I. Behavioural (non-chemical) addictions. *Br J Addiction* 1990;85:1389-1394.
30. Dannon PN, Iancu I, Grunhaus L. Naltrexone treatment in kleptomaniac patients. *Hum Psychopharmacol* 1999;14:583-585.
31. Fishbain D. Kleptomania as risk-taking behavior in response to depression. *Am J Psychotherapy* 1987; XLI(4):598-603.
32. Kindler S, Dannon P, Iancu I, Horesh N, Kotler M. Emergence of kleptomania during treatment for depression with serotonin selective reuptake inhibitors. *Clin Neuropharmacol* 1997;20:126-129.
33. Dannon PN. Topiramate for the treatment of kleptomania: A case series and review of the literature. *Clin Neuropharmacol* 2003;26:1-4.
34. Grant JE, Kim SW. Adolescent kleptomania treated with naltrexone: A case report. *Eur Child Adolesc Psychiatry* 2002;11:92-95.
35. Grant JE. Outcome study of kleptomania patients treated with naltrexone: A chart review. *Clin Neuropharmacol* 2005;28:11-14.
36. McConaghy N, Blaszcynski A. Imaginal desensitization: A cost-effective treatment in two shop-lifters and a binge-eater resistant to previous therapy. *Aust N Z J Psychiatry* 1988;22:78-82.