

WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.084

Volume 12, Issue 21, 1176-1190.

Review Article

ISSN 2277-7105

KLEPTOMANIA; A REVIEW

Dr. Venkatesh S.*

India.

Article Received on 19 October 2023,

Revised on 08 Nov. 2023, Accepted on 30 Nov. 2023

DOI: 10.20959/wjpr202321-30499



*Corresponding Author Dr. Venkatesh S.

India.

ABSTRACT

Propensity for stealing is described by intermittent scenes of urgent taking. Taking regularly happens through shoplifting. The things included are for the most part of insignificant esteem and are not required by the individual taking them. The impulses to take are self image dystonic and irritating to the patient. The fundamental element for the determination of compulsion to steal is a repetitive inability to oppose driving forces to take things, despite the fact that those things are not required for individual use or for their money related esteem. The individual encounters an expanding feeling of pressure only preceding the robbery and feels joy, delight, or alleviation while submitting the burglary. These patients are typically alluded to

psychiatry for the assessment of criminal obligation by a court request. The substance of the court fie just as the demonstration resisted by the subject and the nearness of a psychological issue ought to be considered. If there should arise an occurrence of shoplifting, malingering must be precluded clench hand regardless of whether the subject has a recently affirmed analysis of compulsion to steal.

INTRODUCTION

Propensity for stealing is a cryptic condition in which wrongdoing (burglary) shapes a piece of its indicative criteria. As anyone might expect, it is ordinarily utilized by the protection counsel for moderation of burglary and related offenses, particularly for rehash robbery offenders. The term 'klopemania' changed to 'kleptomanie' and portrayed by the French doctors Marc and Esquirol as "people having overpowering and automatic desires to steal." [1] Therefore, propensity for stealing was incorporated into the Demonstrative and Measurable Manual of Mental Issue (DSM-I) in 1962 as a valuable term as opposed to a formal finding. Strikingly, the term was overlooked out and out from the DSM-II before being reintroduced

in the DSM-III under the class of 'motivation control issue not generally indicated'. Propensity for stealing holds its situation under the equivalent analytic classification in DSM-IV-TR.^[2] The existing writing shows that compulsive pilferers frequently report absence of confidence, a troublesome youth and conjugal clashes,^[3] which may simply be one of the signs of marginal identity issue,^[4,5] and score ineffectively on socialization however well on impulsivity and curiosity chasing.^[6,7] Neurotics have high rates of substance misuse and mind-set issue,^[8] just as tension issue.^[9] The degree to which fanatical habitual turmoil (OCD) and propensity for stealing co-happen isn't surely known.

LITREATURE REVIEW

Compulsive pilferers have high rates of substance misuse and state of mind issue, [10] just as nervousness issue. The degree to which over the top impulsive confusion (OCD) and compulsion to steal co-happen isn't surely known. Rates of co-happening OCD in tests of natural pilferers have extended from 6.5% to 60%. An ongoing report detailed that natural pilferers who look for treatment have a higher predominance of identity issue contrasted with a nonclinical populace. Early writing recommended that thievishness especially influenced ladies of high social and financial status to such an extent that researchers accepted its etiology as originating from the female regenerative framework. It isn't that researchers did not portray cases of male and lower class natural pilferers in the nineteenth century, however the proof made no progress as the media was progressively keen on socially conspicuous ladies criminals who utilized thievishness as a resistance in court preliminaries. More up to date thinks about have likewise appeared female dominance, with an early period of beginning of taking in females and individuals with co bleak identity issue.

EPIDEMOLOGY

The term propensity for stealing was authored by the French therapists Esquirol and Marc in the nineteenth century. From as far back as 1878, instances of thievishness in America have been accounted for in the literature. Compulsion to steal is portrayed in both the restorative and lawful writings for quite a long time, going back to the mid nineteenth century when the Swiss doctor Mathey who worked with the "crazy" composed of "a special franticness described by the inclination to take without thought process and without need. The propensity to take is perpetual yet the stealing inclination triumphs, it enslaves the will." He named this condition as 'klopemania' or a 'taking madness'.

ETIOLOGY

Behçet's ailment is a multisystemic, backsliding, autoinflammatory turmoil of obscure beginning and fundamental course connection of kleptomania. [21-23] Clinical signs of this issue incorporate intermittent oral aphthae, genital ulcers, erythema nodosum, pseudofolliculitis, uveitis and joint inflammation. Association of the focal sensory system is seen in 5– 15% of patients. [21] These patients for the most part create brainstem meningoencephalitis and in 15–20% of patients with neurological disarranges Dural sinus thrombosis occurs.^[21] The neurological sign of neuro-Behçet's infection may incorporate an assortment of disorders, and mental issue might be seen, either exclusively or in blend with other dysfunctions. [21] Intellectual deficiencies, lack of concern, intense psychosis, identity and social issue are among the neuropsychiatric issue that may go with Behçet's disease^[24] .Motivation control issue establish a class of mental issue portrayed by inability to oppose an allurement, desire or drive that may hurt oneself or others. Numerous mental issue highlight indiscreet conduct, including substance-related scatters, paraphilias, consideration shortfall hyperactivity issue, withdrawn identity issue, lead issue, schizophrenia and state of mind issue. The overhauled fourth release of the Indicative and Measurable Manual of Mental Issue incorporates the classification 'drive control issue not somewhere else grouped', which comprises of propensity for stealing, neurotic betting, arsonist tendencies, trichotillomania and irregular touchy disorder. [25] Compulsion to steal is characterized as the inability to oppose driving forces to take objects not required for individual use or their financial value.[26,27]

PATHOPHYSIOLOGY

Compulsion to steal is frequently been discovered co horrible with other mental disarranges including melancholy, habit and identity issue. Different auxiliary cerebrum sores have been related with propensity for stealing including head trauma. Diminished white issue miniaturized scale basic respectability in the second rate frontal mind locale has additionally been recognized in patients with compulsion to steal. Practical life systems of motivation control issue including propensity for stealing has as of late been reviewed. While prescriptions that influence the serotonergic framework have been most generally considered for the treatment of compulsion to steal, their clinical impacts have been unassuming or conflicting or even incomprehensible. Prescriptions that influence dopaminergic neurotransmission have gotten less research consideration. Propensity for stealing is the last regular sign of different hidden pathogenic systems which calls for justification of treatment

dependent on co dreary side effects and identity qualities instead of cover utilization of one operator. Expansion of this proposal to other motivation control issue requires reestablished explore intrigue and further elaboration. Advancements in neurobiology and pharmaco hereditary qualities, combined with more current pharmacological models including the narcotic and glutamate frameworks will doubtlessly promote our comprehension of the pathophysiology and pharmacotherapy of compulsion to steal. The previous uncovered reciprocal nucleocapsular hypoxic-ischemic damage, while the last exhibited relative hypo perfusion in the frontal flaps, foremost bits of the cingulated gyri, basal ganglia (right more than left) and cerebella. In the next days, she began encountering repeating nosy musings and a compelling impulse towards taking just as inclination assuaged after the demonstration. This clinical symptomatology settled two or three weeks from that point. She was determined to have passing compulsion to steal/motivation control disorder. [31] Hypoxic-ischemic mind damage has been related with an assortment of neuropsychiatric results. These incorporate intellectual weakness (fundamentally memory shortages), language brokenness, just as social and enthusiastic changes, for example, lack of caution, distractibility, peevishness, etc. [32] Explicitly, with respect to drive control issue, there have been a couple of detailed instances of either all over again or intensifying propensity for stealing after awful mind damage or neurosurgery, just as one instance of new beginning compulsion to steal following hypoxicischemic injury. [33,34] In this specific case, thievishness is accepted to be optional to the disappointment of hindrance from the caudate cores over the hardware including the cingulate gyri and frontal regions. This case delineates the age of neuropsychiatric symptomatology because of neurological sequelae especially through unevenness inside the limbic system. [35] The pathophysiology of propensity for stealing is obscure. Psychoanalytic hypotheses interface impulsive taking to youth injury and careless or damaging guardians, and taking may symbolize repossessing the misfortunes of childhood. [36,37] Kleptomania has additionally been connected to psychosexual issues, for example, sexual constraint and suppression. [36,37] Neuropsychiatric components are likewise thought to assume a job in compulsion to steal. The turmoil seems, by all accounts, to be profoundly connected with mind-set issue and tension range disorders. [38,39] Drive control issue can present as neuropsychiatric sequelae of head injury and horrendous cerebrum injury. [41] New beginning compulsion to steal has been accounted for in two instances of shut head trauma. [42] Cerebrum issue, for example, epilepsy^[40] and frontotemporal demential have been accounted for to cause thievishness. Propensity for stealing has likewise been accounted for as dumbfounding symptom of SSRIs in three patients. [43]

DIAGONSIS

Self-report surveys can be valuable extras to a practical evaluation looking at the precursors, outcomes, and relates of propensity for stealing conduct, especially given the high co bleakness rate of full of feeling, motivation control, substance use, and over the top urgent scatters. [44] Measures, for example, the Beck Wretchedness Stock II and the Beck Uneasiness Stock^[45] can help recognize the seriousness (i.e., dimensional viewpoints) of burdensome and tension side effects. Talks of the Restraint Infringement Impact^[46] may likewise inspire useless perceptions. Research shows that among shoplifters, people who experience steady, worldwide sentiments of disgrace (e.g., "I'm a terrible individual") are bound to keep taking; though the individuals who experience circumstance explicit sentiments of disgrace (e.g., envisioning getting discovered taking when one is a something else "great" individual) are bound to stop. [47] At last, conditions that may diminish inspiration for change^[48], including identity issue, for example, reserved identity issue. ^[49,50] ought to be recognized and suitably tended to. The Y-BOCS is definitely not an approved poll for compulsion to steal and isn't shown for use in thievishness. In any case, in endeavoring to unbiasedly measure improvement in the patient, the group chose to utilize the Y-BOCS as a surrogate marker for the force of the impulses as they identified with her indications of kleptomania. It incorporates 10 questions appraised on a Like rt-type scale. [51,53] and seriousness is evaluated as subclinical 0 to 7; gentle 8 to 15; moderate 16 to 23; extreme 24 to 31; and extraordinary 32 to 40. The patient's underlying score was 33. The treatment group for the situation report portrayed here utilized the Y-BOCS22 to rate the indications of compulsion to steal in the patient. Y-BOCS is an approved survey that rates the seriousness of manifestations in over the top enthusiastic confusion and was utilized in an investigation of patients with impulsive purchasing to pursue changes in the compulsions.^[52] The Y-BOCS is certifiably not an approved poll for propensity for stealing and isn't demonstrated for use in thievishness. Notwithstanding, in endeavoring to equitably check improvement in the patient, the group chose to utilize the Y-BOCS as a surrogate marker for the force of the impulses as they identified with her side effects of propensity for stealing. The patient was told to answer the survey regarding her compulsion to steal manifestations as it were. Y-BOCS was managed multiple times at roughly eight-week interims.

DIAGONSIS; Neurobiology

In spite of the fact that people with compulsion to steal report a powerlessness to oppose their desire to shoplift, the etiology of this wild conduct is misty. Serotonergic brokenness in the

ventromedial prefrontal cortex has been speculated to underlie the poor basic leadership found in people with kleptomania. [54] One investigation inspected the platelet serotonin transporter in 20 patients with compulsion to steal. The quantity of platelet 5-HT transporters, assessed by methods for official of 3H-paroxetine, was lower in neurotic subjects contrasted with solid controls^[55] in this way proposing some nonspecific serotonergic brokenness. One investigation of neurocognitive working in 15 ladies determined to have thievishness uncovered, as a gathering, no noteworthy shortages in trial of frontal flap working when contrasted with regulating esteems. Those people with more prominent propensity for stealing indication seriousness, in any case, had essentially underneath normal scores on something like one proportion of official functioning.^[56] Fundamentally higher rates of intellectual impulsivity (estimated by the Barratt Imprudence Scale, tenth variant) were found in 11 subjects with compulsion to steal when contrasted with a control gathering of mental patients without kleptomania. [59] Case reports and neuroimaging considers give extra insights as to a conceivable etiology for compulsion to steal. Harm to the orbitofrontal-subcortical circuits of the cerebrum has been accounted for to result in propensity for stealing. [57] Neuroimaging procedures have exhibited diminished white issue microstructural honesty in the ventral-average frontal mind locales of neurotics contrasted with controls.^[58] These pictures are predictable with discoveries of expanded impulsivity in compulsive pilferers. [59] These examinations additionally bolster the speculation that probably a few people with propensity for stealing will most likely be unable to control their drive to take. Further imaging and neuropsychological appraisals in an extensive example may aid further explaining the etiology of this issue.

TREATMENT

Tricyclic antidepressants (imipramine, nortriptyline), SSRIs (fluoxetine, fluvoxamine, paroxetine), the narcotic rival naltrexone, and state of mind stabilizers (lithium, valproate) have met with changing degrees of accomplishment. Systems focusing on inclination and conduct decrease and instruments for adapting to desires and conduct (e.g., subjective social treatments) may speak to essential adjunctive segments. [60,61-67] No meds are FDA-endorsed for treating propensity for stealing. Thusly, it is critical to educate patients regarding any offname utilization of prescriptions for this issue, just as the observational reason for thinking about pharmacologic treatment.

SSRIs Just case reports exist on the utilization of SSRIs in treating propensity for stealing. The turmoil may impart a typical pathology to pathologic betting, and as far as we can tell seems to react to comparable treatments. We draw on research of pathologic betting just as our clinical involvement in picking SSRIs as first-line treatment, particularly for patients with noteworthy disposition symptoms. We propose titrating SSRIs to the greatest prescribed measurement. As in the treatment of pathologic betting, doses of SSRIs required to treat compulsion to steal indications have all the earmarks of being higher than normal measurements required to treat burdensome scatters. A SSRI ought not be viewed as inadequate except if it has been striven for somewhere around 10 to 12 weeks and the most elevated measurements endured or prescribed by the producer has been come to. Reaction to SSRIs as a rule is described by diminished considerations about taking, diminished taking conduct, and improvement in social and word related working. On the off chance that a SSRI is just incompletely compelling, we think about growth with naltrexone, buspirone, or a state of mind stabilizer.

Naltrexone Patients taking naltrexone regularly report less exceptional desires to take. The inclinations may not vanish but rather are frequently adequately decreased with the goal that the patient can oppose them all the more effectively. Patients additionally report that the rush related with taking is diminished or wiped out. Naltrexone was utilized in the primary medicine investigation of compulsion to steal and demonstrated a huge decrease in the power of desires to take, taking considerations, and taking conduct. Normal dose was 150 mg/d;^[61] a diminished measurements (e.g., 50 mg/d) may work in teenagers with kleptomania. [70] Sickness as a reaction can be decreased by beginning patients on 25 mg/d for the initial 3 or 4 days and potentially including ondansetron, 4 to 8 mg/d. Queasiness and looseness of the bowels are typically mellow and resolve inside the primary week. Clinically, most patients react to naltrexone inside about fourteen days. From that point onward, the measurement more often than not should be balanced. In patients with co bleak gloom, increase with a SSRI may forestall intensifying of untreated burdensome manifestations. It is reasonable to acquire liver capacity tests preceding naltrexone organization and again 3 to about a month in the wake of beginning the drug.^[71] Continue testing ought to be performed at 2-to 4-week interims for the following 2 months, at that point once per month for the accompanying 3 months. Following a half year, testing three to four times each year is generally adequate. Nonsteroidal analgesics ought not be utilized with high measurements of naltrexone (>50 mg/d), as simultaneous use may expand the danger of hepatic transaminase elevation. [71]

Mind-set stabilizers Reactions to lithium and valproate have been depicted in two case reports of patients with kleptomania.^[64,65] On account of valproate, the powerful dose was 2,000 mg/d, though lithium decreased taking desires at a serum dimension of 0.5 mEq/L. In spite of the fact that it is untimely to suggest the utilization of inclination stabilizers, their conceivable advantage might be identified with their adequacy in bipolar confusion treatment and the presence of highlights (e.g., impulsivity) shared by propensity for stealing and bipolar issue.

Atypical antipsychotics In spite of the fact that there is no proof that atypical antipsychotics are helpful in compulsion to steal, expanding a SSRI with an atypical neuroleptic might be useful. Atypical antipsychotics have been investigated as increasing specialists in the treatment of non-crazy issue and practices, including pathologic betting and fanatical habitual confusion Compulsion to steal may likewise be viewed as a type of addictive conduct and has been appeared to be related with other substance use issue (e.g., liquor and nicotine). [75] Naltrexone, a sedative adversary used to treat addictive practices, has been appeared to lessen thievishness symptoms. [77–79] A twofold visually impaired, fake treatment controlled investigation of 25 patients who were managed naltrexone indicated huge improvement in kleptomania. [80] Topiramate, an anticonvulsant tranquilize, has been appeared to be powerful in motivation control issue, and as of late topiramate showed adequacy in treating gorge eating. [81] Once more, this has been extrapolated to propensity for stealing with empowering results in little case series. [82,83] Moreover, there are case reports in the writing archiving compulsion to steal reacting to lithium, valproate, trazodone, and electroconvulsive therapy. [72,73,74,75]

TREATMENT; psychotherapy

Intellectual conduct treatment Dependent on the proof of its viability in treating pathologic betting, CBT may hold guarantee as monotherapy for mellow instances of propensity for stealing. Blend treatment Consolidated pharmacologic and social treatment might be the ideal treatment methodology for compulsion to steal. As far as we can tell, patients who react just halfway or neglect to react to pharmacotherapy alone are bound to discover help with a blend of medication and subjective social treatments. Different psychotherapeutic procedures alone and in blend with psychotropic prescriptions have been accounted for to improve urgent stealing. [84,85,86] Desensitization was compelling in a little investigation of three patients with drive control issue: two shop-lifters and one gorge eater. [87] In an investigation of 28 patients

with habitual purchasing (a condition firmly identified with motivation control issue), subjective social treatment (CBT) was observed to be powerful in diminishing the impulses.

CONCLUSION

Propensity for stealing as reaction of upper treatment has been accounted for from a few unique sources. Prompting the end that other synapse pathways, well beyond serotoninergic ones, can assume a job in development of this uncommon and interesting marvel. Some investigation demonstrated that thievishness may once in a while develop amid the clinical course of neuro-Behçet's infection. Regardless of whether disinhibition and motivation control brokenness brought about by official capacity impedance may have started compulsion to steal side effects stays to be illustrated. Behaviorists have an amazing etiological and treatment hypothesis yet just a little measure of proof right now exists in the distributed writing. Future research should keep on depicting the utilization of a useful examination and evaluation in the treatment of propensity for stealing, giving progressively nitty gritty direction to clinicians and analysts in the field. Expanded mindfulness and screening by clinicians may build the quantity of patients looking for help. People who experience the ill effects of this condition can sensibly anticipate a decrease and conceivable reduction of manifestations with a blend of psychotherapy and psychopharmacology.

REFERENCES

- 1. Ronald AF, Girish NP. Kleptomania: A brief intellectual history. Association for Historical Research in Marketing, 2003; 201-209.
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition: DSM-IV-TR. American Psychiatric Pub, 2000.
- 3. Goldman MJ. Kleptomania: The Compulstion to Steal What Can Be Done. Far Hills, NJ: New Horizon Press, 1998.
- 4. McElroy SL, Hudson JI, Pope HG, Keck PE. Kleptomania: clinical characteristics and associated psychopathology. Psychol Med., 1991; 21: 93-108.
- 5. Grant JE, Kim SW. Clinical characteristics and associated psychopathology of 22 patients with kleptomania. Compr Psychiatry, 2002; 43: 378-84.
- 6. Grant JE, Kim SW. Temperament and early environmental inflences in kleptomania. Compr Psychiatry, 2002; 43: 223-8.

- 7. Sarasalo E, Bergman B, Toth J. Personality traits and psychiatric and somatic morbidity among kleptomaniacs. Acta Psychiatr Scand, 1996; 94: 358-64.
- 8. Baylé FJ, Caci H, Millet B, Richa S, Olié JP. Psychopathology and comorbidity of psychiatric disorders in patients with kleptomania. Am J. Psychiatry, 2003; 160: 1509-13.
- 9. Grant JE. Family history and psychiatric comorbidity in persons with kleptomania. Compr Psychiatry, 2003; 44: 437-41.
- Baylé FJ, Caci H, Millet B, Richa S, Olié JP. Psychopathology and comorbidity of psychiatric disorders in patients with kleptomania. Am J Psychiatry, 2003; 160: 1509-13.11.
- 11. Grant JE. Family history and psychiatric comorbidity in persons with kleptomania. Compr Psychiatry, 2003; 44: 437-41.
- 12. Presta S, Marazziti D, Dell'Osso L, et al. Kleptomania: clinical features and comorbidity in an Italian sample. Compr Psychiatry, 2002; 43: 7-12.
- 13. Grant JE. Co-occurrence of personality disorders in persons with kleptomania: a preliminary investigation. J Am Acad Psychiatry Law, 2004; 32: 395-8.
- 14. Aboujaoude E, Gamel N, Koran LM. Overview of Kleptomania and Phenomenological Description of 40 Patients. Prim Care Companion J Clin Psychiatry, 2004; 6: 244-7.
- 15. Sarasalo E, Bergman B, Toth J. Theft behaviour and its consequences among kleptomaniacs and shoplifters--a comparative study. Forensic Sci. Int., 1997; 86: 193-205.
- 16. Grant JE, Potenza MN. Gender-related differences in individuals seeking treatment for kleptomania. CNS Spectr., 2008; 13: 235-45.
- 17. Hoertel N, Dubertret C, Schuster JP, Le Strat Y. Sex differences in shoplifting: results from a national sample. J Nerv Ment Dis., 2012; 200: 728-33.
- 18. Goldman MJ. Kleptomania: making sense of the nonsensical. *Am J. Psychiatry*. 1991; 148: 986–996.
- 19. Eastman BD. A case of kleptomania. Am J Psychiatry, 1878; 35: 254–271.
- 20. Ronald AF, Girish NP. Kleptomania: A brief intellectual history. Association for Historical Research in Marketing, 2003; 201-209.
- 21. Akman-Demir G, Serdaroğlu P, Tasci B: Clinical patterns of neurological involvement in Behçet's disease: evaluation of 200 patients. The Neuro-Behçet Study Group. Brain., 1999; 122: 2171–2182.
- 22. Erbilen E, Albayrak S, Gulcan E, et al: Acute coronary stenosis in a young man with Behçet's syndrome. Med Princ Pract., 2008; 17: 157–160.

- 23. Pekiner FN, Aytugar E, Demirel GY, et al: HLA-A, B (class I) and HLA-DR, DQ (class II) antigens in Turkish patients with recurrent aphthous ulceration and Behçet's disease. Med Princ Pract., 2013. E-pub ahead of print. DOI: 10.1159/000348366.
- 24. Oktem-Tanör O, Baykan-Kurt B, Gürvit IH, et al: Neuropsychological follow-up of 12 patients with neuro-Behçet disease. J. Neurol, 1999; 246: 113–119.
- 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. Curr Psychiatry Rep., 2003; 5: 36–40.
- 26. Dell'Osso B, Altamura AC, Allen A, et al: Epidemiologic and clinical updates on impulse control disorders: a critical review. Eur Arch Psychiatry Clin Neurosci, 2006; 256: 464–475.
- 27. Grant JE, Odlaug BL, Wozniak JR: Neuropsychological functioning in kleptomania. Behav Res Ther 2007; 45: 1663–1670.
- 28. Aizer A, Lowengrub K, Dannon PN. Kleptomania after head trauma: Two case reports and combination treatment strategies. Clin Neuropharmacol, 2004; 27: 211-5.
- 29. Grant JE, Correia S, Brennan-Krohn T. White matter integrity in kleptomania: A pilot study. Psychiatry Res., 2006; 147: 233-7.
- 30. Probst CC, van Eimeren T. The functional anatomy of impulse control disorders. Curr Neurol Neurosci Rep., 2013; 13: 386.
- 31. American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-5. 5th edn. Washington DC: American Psychiatric Association, 2013; 478–80.
- 32. Wolstenholme N, Moore B. The clinical manifestations of anoxic brain injury. Progr Neurol Psychiatry, 2010; 14: 8–13.
- 33. Talih FR. Kleptomania and potential exacerbating factors: a review and case report. Innov Clinc Neurosci, 2011; 8: 35–9.
- 34. Bakheit AMO, Brennan D. Theft in a medical ward: a case of transient kleptomania following anoxic brain injury. Adv Clin Neurosci Rehabil(ACNR), 2014; 14: 1–2.
- 35. Hurley RA, Fisher RE, Taber KH. Clinical and functional imaging in neuropsychiatry. In: In: Yudofsky SC, Hales RE, eds. Essentials of neuropsychiatry and behavioral neurosciences. 2nd edn. Washington DC: American Psychiatric Publishing, 2010; 55–94.
- 36. Goldman MJ. Kleptomania: making sense of the nonsensical. *Am J Psychiatry*, 1991; 148: 986–996.
- 37. Sadock BJ, Kaplan HI, Sadock VA. *Synopsis of Psychiatry, Tenth Edition*. Philadelphia, PA:

- 38. McElroy SL, Pope HG Jr, Hudson JI, et al. Kleptomania: a report of 20 cases. *Am J Psychiatry*, 1991; 148: 652–657.
- 39. Grant JE. Understanding and treating kleptomania: new models and new treatments. *Isr J Psychiatry Relat Sci.*, 2006; 43: 81–87.
- 40. Kaplan Y. Epilepsy and kleptomania. Epilepsy Behav, 2007; 11: 474–475.
- 41. McAllister TW. Neuropsychiatric sequelae of head injuries. *Psychiatr Clin North Am.*, 1992; 15: 395–413.
- 42. Aizer A, Lowengrub K, Dannon PN. Kleptomania after head trauma: two case reports and combination treatment strategies. *Clin Neuropharmacol*, 2004; 27: 211–215.
- 43. Kindler S, Dannon PN, Iancu I, et al Emergence of kleptomania during treatment for depression with serotonin selective reutake inhibitors. *Clin Neuropharmacol.*, 1997; 20: 126–129.
- 44. Grant, J. E. Understanding and treating kleptomania: New models and new treatments. Israel Journal of Psychiatry & Related Sciences, 2006a; 43: 81-87.
- 45. Beck, A. T., Steer, R. A., & Brown, G. K. Manual for the Beck Depression Inventory, 2nd ed. San Antonio, TX: The Psychological Corporation, 1996.
- 46. Larimer, M.E., Palmer, R.S., & Marlatt, G.A. Relapse prevention. An overview of Marlatt's cognitive-behavioral model. Alcohol Research and Health, 1999; 23: 151-160.
- 47. Tibbetts, S. G. Shame and rational choice in offending decisions. Criminal Justice and Behavior, 1997; 24: 234-255.
- 48. Miller, W. R., & Rollnick, S. Motivational Interviewing: Preparing People for Change (2nd Ed.). New York: Guilford Press, 2002.
- 49. Grant, J. E., & Kim, S. W. An open-label study of naltrexone in the treatment of kleptomania. Journal of Clinical Psychiatry, 2002b; 63: 349-356.
- 50. Kohn, C. S., & Antonuccio, D. O. Treatment of kleptomania using cognitive and behavioral strategies. Clinical Case Studies, 2002; 1: 25-38.
- 51. Kim SW, Dysken MW, Pheley AM, Hoover KM. The Yale-Brown Obsessive-Compulsive Scale: measure of internal consistency. *Psychiatry Res.*, 1994; 51: 203–211.
- 52. Mitchell JE, Burgard M, Faber R, et al. Cognitive behavioral therapy for compulsive buying disorder. *Behav Res Ther.*, 2006; 4: 1859–1865.
- 53. Goodman WK, Price LH. Assessment of severity and change in obsessive compulsive disorder. *Psychiatr Clin North Am.*, 1992; 15: 861–869.
- 54. Bechara A, Tranel D, Damasio H. Characterization of the decisionmaking deficit of patients with ventromedial prefrontal cortex lesions. Brain., 2000; 123(Pt 11): 2189-202.

- 55. Marazziti D, Presta S, Pfanner C, Di Nasso E, Cassano GB. The biological basis of kleptomania and compulsive buying. Scientific Abstracts, American College of Neuropsychopharmacology 39th Annual Meeting, 2000 Dec 10-14; San Juan, Puerto Rico.
- 56. Grant JE, Odlaug BL, Wozniak JR. Neuropsychological functioning in kleptomania. Behav Res Ther., 2006; 45(7): 1663-70.
- 57. Nyffeler T, Regard M. Kleptomania in a patient with a right frontolimbic lesion. Neuropsychiatr Neuropsychol Behav Neurol, 2001; 14(1): 73-6.
- 58. Grant JE, Correia S, Brennan-Krohn T. White matter integrity in kleptomania: a pilot study. Psychiatry Res., 2006; 147(2-3): 233-7.
- 59. Bayle FJ, Caci H, Millet B, Richa S, Olie JP. Psychopathology and comorbidity of psychiatric disorders in patients with kleptomania. Am J Psychiatry, 2003; 160(8): 1509-13.
- 60. McElroy SL, Pope HG, Hudson JI, Keck PE, White KL. Kleptomania: a report of 20 cases. *Am J Psychiatry*, 1991; 148: 652-7.
- 61. Grant JE, Kim SW. An open-label study of naltrexone in the treatment of kleptomania. *J Clin Psychiatry*, 2002; 63: 349-56.
- 62. Chong SA, Low BL. Treatment of kleptomania with fluvoxamine. *Acta Psychiatr Scand*, 1996; 93: 314-5.
- 63. Kraus JE. Treatment of kleptomania with paroxetine. J Clin Psychiatry, 1999; 60: 793.
- 64. Burstein A. Fluoxetine-lithium treatment for kleptomania. *J Clin Psychiatry*, 1992; 53: 28-9.
- 65. Kmetz GF, McElroy SL, Collins DJ. Response of kleptomania and mixed mania to valproate. *Am J Psychiatry*, 1997; 154: 580-1.
- 66. Lepkifker E, Dannon PN, Ziv R, Iancu I, Horesh N, Kotler M. The treatment of kleptomania with serotonin reuptake inhibitors. *Clin Neuropharmacol*, 1999; 22: 403.
- 67. Durst R, Katz G, Knobler HY. Buspirone augmentation of fluvoxamine in the treatment of kleptomania. *J Nerv Ment Dis.*, 1997; 185: 586-8.
- 68. Kim SW. Opioid antagonists in the treatment of impulse-control disorders. *J Clin Psychiatry*, 1998; 59: 159-64.
- 69. Grant JE, Kim SW. Pharmacotherapy of pathological gambling. *Psychiatric Ann.*, 2002; 32: 186-91.
- 70. Grant JE, Kim SW. Adolescent kleptomania treated with naltrexone: a case report. *Eur Child Adolescent Psychiatry*, 2002; 11: 92-5.

- 71. Kim SW, Grant JE, et al. A preliminary report on a possible naltrexone and nonsteroidal analgesics interaction. *J Clin Psychopharmacol*, 2001; 21: 632-4.
- 72. Goldman MJ. Kleptomania: making sense of the nonsensical. *Am J Psychiatry*, 1991; 148: 986–996.
- 73. Sadock BJ, Kaplan HI, Sadock VA. *Synopsis of Psychiatry, Tenth Edition*. Philadelphia, PA: Lippincott Williams & Wilkins, 2007.
- 74. Aboujaoude E, Gamel N, Koran L. Overview of kleptomania and phenomenological description of 40 patients. *J Clin Psychiatry*, 2004; 6: 224–247.
- 75. Bayle FJ, Caci H, Millet B, Richa S, Olie J. Psychopathology and comorbidity of psychiatric disorders in patients with kleptomania. *Am J* [VOLUME 8, NUMBER 10, OCTOBER 2011] *Innovations in* CLINICAL NEUROSCIENCE *Psychiatry*, 2003; 160: 1509–1513.
- 76. Grant JE. Understanding and treating kleptomania: new models and new treatments. *Isr J Psychiatry Relat Sci.*, 2006; 43: 81–87.
- 77. Grant JE, Kim SW. An open-label study of naltrexone in the treatment of kleptomania. *J Clin Psychiatry*, 2002; 63: 349–356.
- 78. Grant JE, Kim SW. A case of kleptomania and compulsive sexual behavior treated with naltrexone. *Ann Clin Psychiatry*, 2001; 13: 229–231.
- 79. Grant JE, Kim SW. Adolescent kleptomania treated with naltrexone: a case report. *Eur Child Adolesc Psychiatry*, 2002; 11: 92–95.
- 80. Grant JE, Kim SW, Odlaug BL. A double-blind, placebo-controlled study of the opiate antagonist, naltrexone in the treatment of kleptomania. *Biol Psychiatry*, 2009; 65: 600–606.
- 81. Leombruni P, Lavagino L, Fassino S. Treatment of obese patients with binge eating disorder using topiramate: a review. *Neuropsychiatr Dis Treat.*, 2009; 5: 285-392.
- 82. Dannon PN. Topiramate for the treatment of kleptomania: a case series and review of the literature. *Clin Neuropharmacol*, 2003; 26: 1–4.
- 83. Kaplan Y. Epilepsy and kleptomania. *Epilepsy Behav*, 2007; 11: 474–475.
- 84. Goldman MJ. Kleptomania: making sense of the nonsensical. *Am J Psychiatry*, 1991; 148: 986–996.
- 85. Sadock BJ, Kaplan HI, Sadock VA. *Synopsis of Psychiatry, Tenth Edition*. Philadelphia, PA:
- 86. Grant JE. Understanding and treating kleptomania: new models and new treatments. *Isr J Psychiatry Relat Sci.*, 2006; 43: 81–87.

87. McConaghy N, Blaszczynski A. Imaginal desensitization: a cost effective treatment in two shoplifter and a binge eater resistant to previous therapy. Aust N Z J Psychiatry, 1988; 22: 78–82.