

PYROMANIA AND KLEPTOMANIA

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PYROMANIA



INTRODUCTION

- **Pyromania** is defined as a pattern of deliberate setting of fires for pleasure or satisfaction derived from the relief of tension experienced before the fire-setting.
- The name of the disorder comes from two **Greek** words that mean "**fire**" and "**loss of reason**" or "**madness**."
- Fire-setting behavior can cause shame to the individual, with one study finding that 38.1 % of individuals with pyromania considered **committing suicide** to stop their fire-setting behavior.

INTRODUCTION

- Tension or emotional arousal before the act and relief after the act, similar to OCD and kleptomania.
- Pleasure or relief when setting fires, or when watching or engaging in its aftermath.
- Fire setting is not done for monetary reasons, to hide a crime, express a sociopolitical idea, vengeance, or in response to psychosis or judgment that is impaired by major neurocognitive disorder, intellectual disability, or substance intoxication.

INTRODUCTION

- Pyromania is highly **comorbid** with other disruptive, **impulse-control**, and **conduct disorders, substance use disorders, gambling disorders, and bipolar disorders**.
- It is important to differentiate pyromania from other causes of fire setting.

INTRODUCTION

- Fire setting is a behavior that can be **accidental or intentional**, and is **not always a symptom of an underlying psychiatric illness**.
- Fire setting (e.g., **playing with matches, lighters**) may also occur **during childhood** due to curiosity and may be part of the developmental process.
- Diagnosis of pyromania is **excluded if the fire setting is better explained by:-**
 - Conduct disorder
 - Mania
 - Antisocial personality disorder

INTRODUCTION

- Major neurocognitive impairment
- Intellectual disability
- Substance intoxication
- in response to delusions
- Hallucinations
- Medical condition such as **epilepsy**.

EPIDEMIOLOGY

- Lack of epidemiologic data on pyromania
- According to **DSM-5**, the prevalence of pyromania is **unknown** but lifetime fire setting in a sample of US residents 18 and older was found to be about **1.0 %**.
- In this sample, Caucasian males aged **18 to 35** living in the western region of the US had higher rates of fire setting.

EPIDEMIOLOGY cont.

- Most common comorbidities with fire setting include:-
 - Lifetime alcohol and marijuana use disorders
 - Conduct disorder
 - Antisocial and obsessive-compulsive personality disorders.
 - Most common motive for fire setting in general is **revenge and anger**.
- In contrast, pyromania, for which revenge and anger are excluded as causes of fire setting, appears to be quite rare.

EPIDEMIOLOGY cont.

- A study found that only 3.3 % of arson recidivists met DSM-IV criteria for pyromania, largely because the majority of the arsonists had committed the act under the influence of alcohol, which is an exclusion criterion in DSM IV and DSM-5.
- In fact, most arsonists do not meet criteria for pyromania.
- A study of 204 inpatient adults on a psychiatric unit found that 3.4 % endorsed current pyromania symptoms and 5.9 % had lifetime pyromania symptoms.
- Literature does exist about the prevalence of pyromania relates to children and adolescents

ETIOLOGY

- Etiology of pyromania is poorly understood.
- Literature on the origins of pyromania has suggested factors ranging from temperament to environmental factors and parental psychopathology.
- Other authors have suggested pyromania and the other impulse-control disorders may share a neurobiological link with **substance use disorders**.
- **Freud** described pyromania as consequence of **abnormal psychosexual development**.
- One case describes the onset of pyromania with the **use of escitalopram**.

Ceylan MF, Durukan I, Turkbay T, et al.: Pyromania associated with escitalopram in a child. *J Child Adol Psychop* 2011; 21:381–382 [Crossref](#), [Google Scholar](#)

ETIOLOGY cont.

- A single case report found a perfusion deficit in the **left inferior frontal lobe** on Single-photon emission tomography (SPECT), which resolved after treatment with **cognitive-behavioral therapy (CBT) and Topiramate**.
- **Frontal inhibitory dysfunction** in pyromania comes from neuropsychological testing of one subject with pyromania:-
- Found **attentional, visual memory, and executive function impairments**.

ETIOLOGY cont.

- Earlier **limited studies** suggest that pyromania may be associated with lower concentration of **norepinephrine and serotonin metabolites 3-methoxy-4hydroxyphenylglycol (MHPG) and 5-hydroxyindoleacetic acid (5-HIAA)**
- Lack of data on the development and course of pyromania.
- Most individuals with pyromania start setting fires in adolescence or young adulthood.

ETIOLOGY cont.

- Frequency and intensity of fire setting may increase over time or may wax and wane.
- Course of pyromania is **unknown** but smaller studies suggest it may be **chronic**.
- Pyromania occurs more frequently in **males** with **poorer social skills and learning difficulties**.

DIAGNOSIS AND CLINICAL FEATURES

- Persons with pyromania often regularly watch fires in their neighborhoods, frequently set off false alarms, and show interest in firefighting paraphernalia
- Their curiosity is evident, but they show no remorse and may be indifferent to the consequences for life or property.
- Fire setters may gain satisfaction from the resulting destruction frequently, they leave obvious clues.
- Commonly associated features include **alcohol intoxication, sexual dysfunctions, below-average intelligence quotient (IQ), chronic personal frustration.**
- Some fire setters become sexually aroused by the fire.

DSM 5

- Deliberate and purposeful fire setting on more than one occasion.
- Tension or affective arousal before the act.
- Fascination with, interest in, curiosity about, or attraction to fire and its situational contexts (e.g., paraphernalia, uses, consequences).
- Pleasure, gratification, or relief when setting fires or when witnessing or participating in their aftermath.

DSM 5

- The fire setting is not done for monetary gain, as an expression of sociopolitical ideology, to conceal criminal activity, to express anger or vengeance, to improve one's living circumstances, in response to a delusion or hallucination, or as a result of impaired judgment (e.g., in major neurocognitive disorder, intellectual disability, substance intoxication).
- The fire setting is not better explained by conduct disorder, a manic episode, or antisocial personality disorder.

ICD 10 (F63.1)

Pathological fire-setting [pyromania]

- Repeated (two or more) acts of, fire-setting without apparent motive.
- The person describes an intense urge to set fire to objects, with a feeling of tension before the act and relief afterwards.
- The person is pre-occupied with thoughts or mental images of fire-setting or of the circumstances surrounding the act (e.g. with fire engines, or with calling out the fire brigade).

ASSESSMENTS FOR FIRE SETTING

- Children's Fire Setting Inventory (CFI)
- Fire Setting Risk Interview (FRI)
- Fire Setting Incident Analysis Parent Version (FIA-P)
- Fire Setting Incident Analysis Child Version (FIA-C)

COURSE AND PROGNOSIS

- Although fire setting often begins in childhood, the typical age of onset of pyromania is unknown.
- When the onset is in adolescence or adulthood, the fire setting tends to be deliberately destructive
- Fire setting in pyromania is episodic and may wax and wane in frequency.
- Prognosis for treated children is good, and complete remission is a realistic goal.
- Prognosis for adults is guarded, because they frequently deny their actions, refuse to take responsibility, are **dependent on alcohol**, and **lack insight**.

TREATMENT

- There are no controlled clinical trials in the treatment of pyromania
- No **FDA** approved medications for the disorder
- Some case reports have shown a reduction in pyromania urges and behaviors with-
- SSRIS
- Lithium
- Naltrexone
- Stimulants
- Topiramate, valproic acid, carbamazepine, anti-androgen medication, clonazepam, and olanzapine.

TREATMENT

- Other reports have shown **no improvement** in pyromania with pharmacotherapy.
- Little literature does exist suggests **CBT** and other **psychotherapies** may be helpful.
- Other successful behavioral therapies for fire setting include **aversive therapy**, education, relaxation techniques, positive reinforcement, and fire safety education.

TREATMENT

- A study found that CBT, fire safety education (FSE), and a home visit from a firefighter (HVF) improved fire setting behaviors in children who had recently set a fire.
- However, CBT was the most efficacious in reducing fire setting, interest in playing with matches, and fire-related behaviors.

KLEPTOMANIA



INTRODUCTION

- **Kleptomania** is one of the least studied of the disruptive, impulse-control, and conduct disorders.
- As conceptualized in **DSM-5**, the key diagnostic feature of kleptomania is that the **items stolen are not needed for personal use** or for their monetary value and **not in response to anger, vengeance, a delusion, or a hallucination**.
- Diagnosis of kleptomania also includes a sense of tension **immediately before the theft** and a sense of **relief at the time of the theft**, similar in structure to obsessive-compulsive disorder (OCD).

INTRODUCTION

- Individual may hoard or return the stolen objects.
- Usually, the thefts are **not pre-planned** and very little attention is given to the consequences of the theft.
- Urge to steal is ego-dystonic and distressing.
- People with kleptomania experience **guilt, depression, and suicide**.
- Emotional stress, jail time, and marital and relationship conflict from shoplifting has been shown to decrease quality of life in individuals with kleptomania

INTRODUCTION

- Diagnosis of kleptomania is not better explained by **conduct disorder, a manic episode, or antisocial personality disorder.**

EPIDEMIOLOGY

- DSM-5 lists the prevalence of kleptomania in the general population to be **0.3 to 0.6%**
- Prevalence of kleptomania in those arrested for **shoplifting ranges from 3.8 to 24%**
- Study of 204 consecutive admissions of psychiatric inpatients found a current prevalence of **7.8%** and a lifetime prevalence of **9.3%**
- Course of kleptomania is chronic with waxing and waning of symptoms.
- As the disorder is **egodystonic**, patients are embarrassed to discuss their symptoms and thus the disorder is usually **underdiagnosed**

EPIDEMIOLOGY cont.

- Cross-cultural comparison of kleptomania between participants in the **USA and Brazil** found that both groups sought treatment 10 to 20 years after the illness onset and had **high rates of suicide**.
- Begin in **childhood, adolescence, or adulthood** but commonly begins during adolescence.
- Occurs more frequently in **women**, with about **two-thirds of kleptomania patients being women**.

EPIDEMIOLOGY cont.

- Females with kleptomania are more likely to be married, shoplift household items, store stolen items, shoplift at a later age

Comorbidity:-

- Compulsive buying
- Mood disorders
- Anxiety disorders
- Eating disorders
- Personality disorders, and substance use disorders, other disruptive, impulse-control, and conduct disorders.

EPIDEMIOLOGY cont.

- Rate of OCD in kleptomania has ranged from 6.5 to 60 %.
- High comorbidity between OCD and kleptomania, it suggested that kleptomania may be a variant of OCD.

ETIOLOGY

Psychosocial Factors

- Symptoms of kleptomania tend to appear in times of **significant stress**, for e.g. **losses, separations**, and **endings of important relationships**.
- **Anna Freud** pointed out that the first thefts from mother's purse indicate the degree to which all stealing is rooted in the oneness between mother and child.
- **Karl Abraham** wrote of the central feeling of being neglected, injured, or unwanted.

ETIOLOGY cont.

Biological Factors:-

- **Brain diseases** and **mental retardation** have been associated with kleptomania, as they have with other disorders of impulse control.
- Focal **neurological signs**, **cortical atrophy**, and **enlarged lateral ventricles** have been found in some patients.
- Disturbances in **monoamine metabolism**, particularly of **serotonin**, have been postulated.

ETIOLOGY cont.

Family and Genetic Factors:-

- Study found that individuals with kleptomania had more first-degree relatives with alcohol use disorders compared to controls.
- In one study, 7 % of first-degree relatives had obsessive-compulsive disorder (OCD).
- In addition, a higher rate of mood disorders has been reported in family members

DIAGNOSIS AND CLINICAL FEATURES

- Essential feature of kleptomania is **recurrent, intrusive, and irresistible urges or impulses to steal unneeded objects**
- It may also be distressed about the possibility or actuality of being apprehended
- **May manifest signs of depression and anxiety.**
- Patients feel **guilty, ashamed, and embarrassed** about their behavior.
- Serious problems with **interpersonal relationships** and often show **signs of personality disturbance**

DIAGNOSIS AND CLINICAL FEATURES

- Most patients with kleptomania steal from **retail stores**, but they may also **steal from family members in their own households**.

DSM 5

- Recurrent failure to resist impulses to steal objects that are not needed for personal use or for their monetary value
- Increasing sense of tension immediately before committing the theft
- Pleasure, gratification, or relief at the time of committing the theft
- The stealing is not committed to express anger or vengeance and is not in response to a delusion or a hallucination
- The stealing is not better explained by conduct disorder, a manic episode, or antisocial personality disorder.

ICD 10

- Repeated (two or more) acts in which the person steals without any apparent motive of gain to the individual or another person.
- The person describes an intense urge to steal with a feeling of tension before the act with relief afterwards

DIFFERENTIAL DIAGNOSIS

- Episodes of theft occasionally occur during psychotic illness, e.g acute **mania**, **major depression** with **psychotic features**, or **schizophrenia**.
- Psychotic stealing is obviously a product of pathological elevation or depression of mood or command hallucinations or delusions.
- Theft in individuals with **antisocial personality disorder** deliberately undertaken for **personal gain**, with some degree of premeditation and planning, often executed with others.
- Antisocial stealing regularly involves the **threat of harm** or **actual violence**, particularly to elude capture.

DIFFERENTIAL DIAGNOSIS

- Acute intoxication with drugs or alcohol may precipitate theft in an individual with another psychiatric disorder or without significant psychopathology
- **Malingering kleptomania** is common in apprehended antisocial types, as well as non antisocial youthful shoplifters.

COURSE AND PROGNOSIS

- Kleptomania may begin in childhood, although most children and adolescents who steal do not become kleptomaniac adults.
- Onset of the disorder generally is late adolescence.
- **Women** are more likely to present for psychiatric evaluation or treatment than are men.
- Men are more likely to be sent to prison.
- Men tend to present with the disorder at about 50 years of age and women, at about 35 years of age.

COURSE AND PROGNOSIS cont.

- Course of the disorder waxes and wanes, but tends to be chronic.
- Persons sometimes have bouts of being unable to resist the impulse to steal, followed by free periods that last for weeks or months.
- Its spontaneous recovery rate is unknown
- Serious impairment and complications are usually secondary to being caught, particularly to being arrested.

COURSE AND PROGNOSIS cont.

- Many persons seem never to have consciously considered the possibility of facing the consequences of their acts
- Disorder in no way impairs a person's social or work functioning.
- Prognosis with treatment can be good, but few patients come for help of their own accord.

TREATMENT

- Due to the guilt associated with the behavior, most individuals with kleptomania seek treatment after being arrested
- Pharmacological studies for kleptomania have been limited.
- **SSRIs** have been tried based on the notion that kleptomania may be an obsessive-compulsive spectrum disorder
- Case reports have shown mixed results for **SSRIs**, with some reports of improvement but at least one report describing patients who developed kleptomania during treatment with SSRIs

TREATMENT cont.

- Open label trial found that the mu-opiate receptor antagonist **Naltrexone** reduced urges to steal and stealing behavior in kleptomania.
- Another open label trial, **NMDA receptor antagonist Memantine** reduced urges to shoplift and shoplifting behavior along with improving impulsivity, mood, anxiety, and psychosocial functioning in kleptomania.
- **Placebo controlled trial** in the treatment of kleptomania there was a significant effect of **Naltrexone** on kleptomania symptoms with **66 %** of the patients that received naltrexone achieving remission whereas 7.7 % of those receiving placebo reported symptom remission.

TREATMENT cont.

- Controlled trial of antidepressants in the treatment of kleptomania found **no benefit of escitalopram in the treatment of kleptomania.**
- Case reports of **Lithium, Topiramate, and Methylphenidate** reducing urges to steal in kleptomania.

TREATMENT cont.

- Little literature regarding the treatment efficacy of **psychotherapy for kleptomania**.
- Case reports and case series suggest that cognitive-behavioral therapy may be helpful.
- **Insight-oriented psychotherapy** and psychoanalysis have been successful, but depend on patients' motivations.
- Those who feel **guilt and shame** may be helped by **insight-oriented psychotherapy** because of their increased motivation to change their behavior.

CONCLUSION

- **PYROMANIA** Repeated (two or more) acts of, fire-setting without apparent motive.
- **KLEPTOMANIA** Repeated (two or more) acts in which the person steals without any apparent motive of gain to the individual or another person
- Person describes an intense urge to set fire to objects, with a feeling of tension before the act and relief afterwards.
- Person describes an intense urge to steal with a feeling of tension before the act with relief afterwards

CONCLUSION

- Lack of epidemiologic data on pyromania/kleptomania in the general population to be **0.3 to 0.6%**
- Prognosis for adults is guarded, because they frequently deny their actions, refuse to take responsibility, are **dependent on alcohol**, and **lack insight**.
- Course of kleptomania is chronic with waxing and waning of symptoms
- Common in women
- No **FDA** approved medications for the disorder

CONCLUSION

- **Naltrexone** reduced urges to steal and stealing behavior in kleptomania.
- Controlled trial of antidepressants in the treatment of kleptomania found **no benefit of escitalopram in the treatment of kleptomania**
- **CBT** and other **psychotherapies** may be helpful.

REFERENCES

- Kaplan & Sadock's comprehensive textbook of psychiatry, 10th edition
- **Kaplan & Sadock's comprehensive textbook of psychiatry, 9th edition**
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THANK YOU