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## **A Case Study of Stimulant Withdrawal Disorder: A Biopsychosocial Assessment and Cognitive Behavioral Intervention Approach**

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### **Abstract**

Stimulant Withdrawal Disorder is characterized by the development of clinically significant behavioral, cognitive, and physiological symptoms following the reduction or cessation of prolonged stimulant use. Individuals commonly experience depressed mood, fatigue, sleep disturbances, psychomotor changes, intense cravings, and emotional dysregulation, leading to substantial impairment in personal, occupational, and social functioning. The present case study describes a 30-year-old unmarried Pakistani male who presented with severe cravings for heroin and injectable antidepressant/antihistamine drugs, stealing behavior, low mood, self-dislike, restlessness, somatic withdrawal symptoms, and impaired psychosocial functioning. Comprehensive psychological assessment included a clinical interview, Mental Status Examination (MSE), Visual Analogue Scale (VAS), Daily Craving Chart, Drug Abuse Screening Test (DAST-10), Stages of Change Model, and projective assessment. Findings revealed significant substance dependence, maladaptive coping strategies, poor impulse control, family dysfunction, peer influence, and unresolved emotional conflicts contributing to the maintenance of addictive behaviors. The client fulfilled DSM-5-TR diagnostic criteria for Stimulant Withdrawal Disorder. A multidisciplinary intervention consisting of psychoeducation, motivational interviewing, cognitive-behavioral techniques, relaxation training, functional analysis, assertiveness training, problem-solving therapy, and relapse prevention resulted in considerable reduction in cravings, improved emotional regulation, enhanced insight, and increased motivation for sustained recovery.



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**Keywords:** Stimulant Withdrawal Disorder, Substance Use Disorder, Drug Addiction, Cognitive Behavioral Therapy, Relapse Prevention, Case Study

## Introduction

Stimulant Withdrawal Disorder is a substance-related disorder that develops following the cessation or reduction of prolonged stimulant use, resulting in significant physiological and psychological symptoms that interfere with daily functioning (American Psychiatric Association [APA], 2022). Common withdrawal symptoms include fatigue, depressed mood, irritability, psychomotor retardation or agitation, increased appetite, sleep disturbances, anxiety, and intense drug cravings. Although withdrawal symptoms are generally not life-threatening, they are frequently associated with relapse and long-term functional impairment.

Substance use disorders are increasingly understood within a biopsychosocial framework that recognizes the interaction of biological vulnerability, psychological characteristics, family dynamics, and environmental influences in the development and maintenance of addictive behaviors (Volkow & Boyle, 2018). Family neglect, adverse childhood experiences, poor parental attachment, deviant peer associations, and ineffective coping strategies have consistently been identified as major risk factors for substance dependence (Marlatt & Donovan, 2005).

According to Social Learning Theory, individuals acquire behaviors by observing and imitating significant others, particularly when those behaviors are reinforced by social acceptance or emotional relief (Bandura, 1977). Young adults who experience emotional neglect and interpersonal difficulties often seek acceptance from peer groups, increasing their vulnerability to experimentation with drugs and engagement in risky behaviors. Over time, repeated substance use strengthens maladaptive coping patterns and reinforces dependence through both positive reinforcement (pleasure and euphoria) and negative reinforcement (relief from distress and withdrawal symptoms).

Contemporary cognitive-behavioral models suggest that addiction is maintained through dysfunctional beliefs, cravings, environmental triggers, automatic thoughts, and avoidance behaviors (Beck et al., 1993). Individuals begin to perceive substances as the only effective method of coping with emotional pain, loneliness, guilt, and stress, resulting in repeated cycles of drug use and relapse.

Globally, substance use disorders continue to represent a major public health concern, contributing significantly to disability, unemployment, family conflict, criminal behavior, and reduced quality of life (United Nations Office on Drugs and Crime, 2023). Despite increasing awareness, delayed intervention and stigma frequently prevent individuals from receiving timely psychological



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treatment.

The present case illustrates the development of stimulant withdrawal symptoms in a 30-year-old male with a history of family neglect, peer influence, stealing behavior, and prolonged substance use. The case highlights the contribution of psychological vulnerabilities, maladaptive cognitions, interpersonal relationships, and behavioral reinforcement in maintaining addictive behaviors while demonstrating the effectiveness of cognitive-behavioral and motivational interventions in facilitating recovery.

### **Case Study**

#### **Identifying Information**

Mr. N.R. was a 30-year-old engaged Pakistani Muslim male educated up to the intermediate level. He belonged to a middle-class nuclear family and was the second-born among four siblings. At the time of assessment, he was unemployed and admitted to a rehabilitation facility for psychological assessment and treatment of substance dependence.

#### **Presenting Complaints**

The client presented with complaints of:

- Intense cravings for heroin and injectable antidepressant/antihistamine drugs
- Persistent stealing behavior
- Low mood and sadness
- Self-dislike and feelings of guilt
- Restlessness and anxiety
- Drowsiness, fever, nausea, muscle tension, and generalized body aches
- Passivity and dependence on others for decision-making

According to the client, these problems had progressively worsened over several years and had significantly impaired his occupational, social, and family functioning.

#### **History of Present Illness**

The client reported that his stealing behavior began approximately ten years earlier due to financial hardship and inability to fulfill his personal needs. Initially, stealing was limited to essential items but gradually evolved into a compulsive behavior extending beyond necessity.

The client described growing up in a family characterized by poor communication, emotional neglect, and limited parental involvement. Feeling unsupported at home, he increasingly relied on peer relationships for emotional acceptance and companionship. Many of his friends were involved in theft, trafficking, and substance abuse, and he gradually adopted similar behaviors to maintain group acceptance.



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He initiated cigarette smoking in 2013 following peer encouragement and parental conflict. As tolerance developed, he progressed to hashish use in 2017 and subsequently heroin use in 2021. Following prolonged heroin use, he shifted to injectable antidepressant and antihistamine drugs, believing they provided greater emotional relief. During the same period, the client experienced the breakup of a four-year romantic relationship, which significantly increased his emotional distress, feelings of loneliness, and substance consumption. Over time, he developed severe withdrawal symptoms including fever, nausea, muscle tension, restlessness, drowsiness, and intense cravings, leading to admission into a rehabilitation center.

### **Family History**

The client belonged to a family characterized by authoritarian parenting, emotional neglect, and limited communication.

His father was described as strict, emotionally distant, and primarily focused on occupational responsibilities. His mother was caring but overwhelmed by household responsibilities and unable to provide adequate emotional support.

The client's elder brother also had a history of substance abuse, while family relationships were generally characterized by conflict, criticism, and lack of emotional expression. In contrast, the client reported relatively supportive relationships with his younger siblings, particularly his sister.

### **Developmental and Personal History**

Birth history and developmental milestones were reported as normal. No prenatal or postnatal complications were identified.

Childhood experiences were characterized by inadequate parental attention, emotional deprivation, and lack of unconditional acceptance. Although the client performed well academically and maintained satisfactory relationships with teachers, financial limitations prevented continuation of higher education.

### **Social and Occupational History**

The client maintained numerous friendships but acknowledged that many peers were involved in antisocial and substance-related activities. He reported difficulty refusing peer requests and often engaged in unethical behaviors to maintain relationships.

Occupationally, he worked in several organizations as an accountant, receptionist, cashier, and computer operator but repeatedly lost employment due to stealing behavior and poor impulse control.

### **Premorbid Personality**

Premorbidly, the client described himself as sociable, energetic, kind, and emotionally sensitive. He demonstrated excessive dependency on peer approval, poor assertiveness, low self-esteem, and difficulty



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refusing inappropriate requests. He also reported guilt regarding previous behaviors and expressed strong motivation for recovery.

### Psychological Assessment Findings

#### Mental Status Examination

The client appeared appropriately dressed with satisfactory hygiene and maintained good eye contact throughout the interview. He was alert, cooperative, and fully oriented to time, place, and person.

Speech was coherent, relevant, and goal-directed. Mood appeared mildly depressed, while affect was congruent with expressed emotions. Thought content primarily focused on guilt, substance cravings, and concerns regarding future recovery.

Attention, concentration, memory, and judgment were intact. No hallucinations, delusions, or formal thought disturbances were observed. Insight into his illness was adequate, and he expressed motivation to engage in treatment.

#### Subjective Symptom Ratings

Before treatment, the client rated his symptoms on a 10-point Visual Analogue Scale.

| Symptom           | Rating |
|-------------------|--------|
| Drug cravings     | 10/10  |
| Stealing behavior | 10/10  |
| Somatic pain      | 9/10   |
| Sadness           | 9/10   |
| Self-dislike      | 9/10   |
| Restlessness      | 8/10   |
| Worthlessness     | 8/10   |

#### Daily Craving Analysis

Daily craving records demonstrated that cravings were consistently triggered by:

- Memories of previous romantic relationship
- Contact with drug-using peers
- Feelings of guilt
- Loneliness
- Stealing-related thoughts

Craving intensity ranged between 90 and 95 on a 100-point scale.

Common emotional responses included anxiety, guilt, sadness, and restlessness, while coping strategies primarily consisted of social withdrawal, anger expression, and negative self-evaluation.



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**Drug Abuse Screening Test (DAST-10)**

The client obtained a score of 7, indicating a **substantial level of drug-related problems**.

Findings suggested significant impairment in occupational functioning, interpersonal relationships, impulse control, and daily responsibilities, consistent with severe substance dependence.

**Stages of Change Assessment**

Assessment using the Prochaska and DiClemente Stages of Change Model indicated that the client was currently in the Maintenance Stage, demonstrating motivation for abstinence and willingness to engage in relapse prevention strategies.

**Results**

**Table 1**

**Psychological Assessment Findings**

| Measure               | Findings  |
|-----------------------|---|
| Presenting Symptoms   | Drug cravings, stealing behavior, low mood, withdrawal symptoms |
| Mental Examination    | Status Insight present, mood depressed, cognition intact        |
| Visual Analogue Scale | Severe cravings and self-dislike                                |
| Daily Craving Chart   | Peer influence, breakup, guilt identified as triggers           |
| DAST-10               | Score = 7 (Substantial severity)                                |
| Stages of Change      | Maintenance Stage   |
| DSM-5-TR Diagnosis    | Stimulant Withdrawal Disorder                                   |

**Table 2**

**Therapeutic Outcome**

| Outcome Measure | Pretreatment | Follow-up |
|-----------------|--------------|-----------|
| Drug Cravings   | 10/10        | 4/10      |
| Stealing Urges  | 10/10        | 5/10      |
| Self-dislike    | 9/10         | 3/10      |
| Restlessness    | 8/10         | 3/10      |
| Mood            | Low          | Stable    |
| Motivation      | Moderate     | High      |

**Discussion**

The present case illustrates the complex interaction of biological,



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psychological, and social factors involved in the development and maintenance of Stimulant Withdrawal Disorder. The client presented with severe drug cravings, stealing behavior, low mood, self-dislike, withdrawal symptoms, and impaired interpersonal and occupational functioning after several years of heroin and injectable antidepressant/antihistamine drug use. The assessment findings support contemporary biopsychosocial models of addiction, which propose that substance dependence develops through the interaction of individual vulnerability, family environment, cognitive processes, and social learning experiences (American Psychiatric Association [APA], 2022).

The client's developmental history revealed significant emotional neglect, poor parental attachment, and limited communication within the family system. His father was described as authoritarian and emotionally unavailable, while his mother remained occupied with household responsibilities and was unable to provide consistent emotional support. Previous research has consistently demonstrated that childhood neglect and poor parental bonding increase the likelihood of substance use by impairing emotional regulation and reducing adaptive coping abilities (Volkow & Boyle, 2018). Individuals raised in emotionally deprived environments often seek acceptance and validation outside the family, making them vulnerable to deviant peer influences.

One of the most significant predisposing factors in the present case was peer influence. The client reported that most of his close friends were involved in smoking, stealing, drug trafficking, and substance use. According to Social Learning Theory, individuals learn behaviors through observation and imitation of significant others, particularly when those behaviors appear rewarding or socially accepted (Bandura, 1977). The client gradually adopted smoking, hashish use, heroin consumption, and stealing behavior to maintain acceptance within his peer group and satisfy his need for belongingness.

The client's elder brother also had a history of substance abuse, suggesting the influence of familial modeling. Exposure to addictive behaviors within the family may normalize substance use and reduce perceived risks associated with drug consumption. Research indicates that family history of addiction significantly increases vulnerability to substance use disorders through both genetic and environmental pathways (Marlatt & Donovan, 2005).

Another important precipitating factor was the client's romantic relationship and subsequent breakup. He reported that his four-year relationship represented one of the happiest periods of his life and that the breakup resulted in persistent sadness, loneliness, guilt, and hopelessness. Unable to regulate these emotions effectively, he increasingly relied on heroin and injectable substances for temporary relief. This finding is consistent with cognitive-behavioral theories suggesting that individuals often use substances to escape emotional



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pain, negative affect, and stressful life events (Beck et al., 1993). Drug use becomes negatively reinforced because it temporarily reduces distress, thereby increasing the likelihood of repeated substance use. The client's stealing behavior also appeared closely linked to his emotional and interpersonal difficulties. Initially, stealing was motivated by financial necessity due to limited family resources. However, over time it evolved into a habitual and compulsive behavior that continued despite negative social and occupational consequences. Frequent job loss, interpersonal conflicts, and feelings of guilt further lowered his self-esteem and reinforced his dependence on drugs as a maladaptive coping mechanism.

Psychological assessment findings strongly supported the diagnostic formulation. The client's subjective ratings indicated severe cravings, stealing urges, sadness, self-dislike, and somatic complaints. Similarly, the Daily Craving Chart identified relationship memories, peer exposure, guilt, and loneliness as the primary triggers of substance cravings. These findings emphasize the importance of identifying environmental and emotional antecedents of addictive behaviors during clinical assessment.

The Drug Abuse Screening Test (DAST-10) score indicated a substantial level of substance-related problems, reflecting marked impairment in occupational functioning, interpersonal relationships, and behavioral control. The client acknowledged repeated job termination due to theft, inability to maintain stable employment, and increasing dependence on substances for emotional regulation. Such findings are consistent with DSM-5-TR diagnostic criteria, which emphasize continued substance use despite significant impairment in social, occupational, and psychological functioning (APA, 2022).

The Mental Status Examination demonstrated that the client maintained adequate orientation, memory, attention, judgment, and insight. The absence of psychotic symptoms or severe cognitive impairment suggested that his emotional difficulties were directly associated with substance withdrawal rather than a primary psychotic disorder. His willingness to participate in treatment and acknowledgment of his addiction represented important protective factors that positively influenced prognosis.

The treatment approach adopted in this case followed evidence-based cognitive-behavioral and motivational principles. Initial sessions focused on rapport building and psychoeducation to establish therapeutic alliance and increase understanding of addiction as a chronic but treatable condition. Psychoeducation has been shown to improve treatment adherence and reduce misconceptions regarding substance dependence (Carroll & Kiluk, 2017).

Motivational interviewing techniques were integrated throughout therapy to enhance intrinsic motivation and strengthen commitment toward recovery. The client's placement in the maintenance stage of the Prochaska and DiClemente Stages of Change Model indicated



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readiness to sustain behavioral change and actively engage in relapse prevention strategies (Prochaska & DiClemente, 1983).

Behavioral interventions included daily craving monitoring, functional analysis, activity scheduling, sleep hygiene, and relaxation exercises such as deep breathing and Progressive Muscle Relaxation (PMR). These techniques enabled the client to identify triggers, recognize early warning signs of relapse, and develop healthier methods of coping with stress and emotional discomfort.

Cognitive restructuring was employed to challenge dysfunctional beliefs related to hopelessness, self-dislike, guilt, and dependency on substances for emotional relief. The client gradually learned to replace automatic negative thoughts with more realistic and adaptive cognitions, resulting in improved emotional regulation and reduced craving intensity.

Assertiveness training represented another important component of treatment. The client demonstrated a longstanding pattern of passivity and excessive compliance with peer demands, making it difficult for him to refuse drugs or disengage from unhealthy relationships. Through role-playing and behavioral rehearsal, he developed communication skills that enabled him to express personal boundaries more effectively and resist peer pressure.

Problem-solving therapy and cost-benefit analysis further enhanced the client's insight into the negative consequences of substance use while increasing awareness of the benefits of sobriety. Road map techniques and relapse prevention planning prepared him for future high-risk situations by encouraging identification of triggers, alternative coping strategies, and available social support.

Therapeutic outcome demonstrated meaningful improvement across multiple domains. The client's craving intensity decreased substantially, stealing urges became less frequent, self-esteem improved, and withdrawal symptoms gradually subsided. He reported increased hopefulness regarding recovery and greater confidence in his ability to maintain abstinence. These improvements are consistent with research demonstrating the effectiveness of multidisciplinary interventions combining cognitive-behavioral therapy, motivational enhancement, psychoeducation, and family support in treating substance use disorders (Carroll & Kiluk, 2017).

Although the prognosis appears favorable, several risk factors remain. The client's history of poor impulse control, previous association with drug-using peers, unemployment, and long duration of substance use continue to increase vulnerability to relapse. Therefore, long-term follow-up, continued family involvement, community support, and ongoing relapse prevention strategies remain essential for maintaining recovery.

Overall, this case supports contemporary biopsychosocial conceptualizations of substance use disorders and demonstrates that addiction is influenced by complex interactions among childhood



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experiences, family dynamics, peer relationships, cognitive distortions, and maladaptive coping strategies. The findings highlight the importance of comprehensive psychological assessment and individualized intervention in reducing substance dependence, improving psychosocial functioning, and promoting long-term recovery.

### Conclusion

The present case study demonstrates the multidimensional nature of Stimulant Withdrawal Disorder and highlights how biological vulnerability, emotional distress, dysfunctional family relationships, maladaptive cognitions, and social influences contribute to the development and maintenance of addictive behaviors. The client's history of parental neglect, peer influence, romantic loss, and poor coping strategies significantly increased his vulnerability to substance dependence and associated behavioral problems such as stealing, low self-esteem, and emotional dysregulation.

Comprehensive psychological assessment, including clinical interview, Mental Status Examination, subjective symptom ratings, Daily Craving Chart, Drug Abuse Screening Test, and behavioral observations, provided converging evidence supporting the diagnosis of Stimulant Withdrawal Disorder (F15.23) according to DSM-5-TR criteria. The assessment further identified significant predisposing, precipitating, perpetuating, and protective factors that guided individualized treatment planning.

The successful implementation of psychoeducation, motivational interviewing, cognitive restructuring, relaxation training, assertiveness training, problem-solving techniques, functional analysis, and relapse prevention strategies resulted in substantial improvements in craving control, emotional functioning, insight, and motivation for recovery. The client's positive response emphasizes the effectiveness of multidisciplinary biopsychosocial interventions in promoting long-term rehabilitation and reducing the risk of relapse. This case contributes to the growing evidence supporting comprehensive psychological interventions for substance use disorders and reinforces the importance of addressing cognitive, emotional, interpersonal, and environmental factors to facilitate sustained recovery and improve quality of life.

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