



## AN EXPLORATORY SINGLE-ARM CLINICAL STUDY ON KAKTINDUK VATI AND MANSAYADI CHOORNA IN THE MANAGEMENT OF AHIPHENA VYASAN (OPIUM ADDICTION)

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### I. Abstract

#### A. Background

Opioid dependence, termed *Ahiphena Vyasan* in Ayurveda, represents a chronic neurobiological disorder with severe physical, psychological, and socioeconomic consequences. In Western Rajasthan, India, the challenge is acutely prevalent and culturally entrenched, with approximately 80% of the adult male population in districts like Jodhpur, Jalore, Pali, Barmer, and Jaisalmer reporting addiction to opium or its derivatives. The complex withdrawal syndrome, characterized by autonomic hyperactivity and profound discomfort, drives high relapse rates, highlighting the urgent need for safe, effective, and integrative therapeutic protocols.

#### B. Aim

The objective of the present study was to evaluate the clinical efficacy and safety of a fixed-dose combined Ayurvedic regimen, consisting of *Kaktinduk Vati* and *Mansayadi Choorna*, in the management of withdrawal symptoms associated with *Ahiphena Vyasan*.

#### C. Methods

A 28-day prospective, single-arm exploratory clinical trial (CTRI/2024/07/070011) was conducted at the Outpatient Department (OPD) of Dr. Sarvepalli Radhakrishnan Rajasthan Ayurved University (DSRRAU), Jodhpur. A total of  $N=30$  clinically diagnosed male patients (aged 16–60 years) exhibiting mild to moderate opioid withdrawal symptoms (Clinical Opiate Withdrawal Scale score 5–24) were enrolled. The intervention consisted of *Kaktinduk Vati* (2 *Vati* twice daily) and *Mansayadi Choorna* (4 g BD), administered orally after meals with normal water. The primary efficacy endpoint was the reduction in the total COWS score from baseline (BT) to after treatment (AT). Statistical analysis was performed using the Wilcoxon matched-pairs signed-rank test.

#### D. Results

The treatment demonstrated an Extremely Significant reduction in the overall severity of opioid withdrawal symptoms ( $P<0.0001$ ). The **Total COWS score achieved 70.17% overall**

**relief.** Marked improvements were observed across various domains, particularly in autonomic hyper-reactivity, including Pupil Size (91.8% relief), Resting Pulse Rate (84.0% relief), and GI Upset (74.7% relief). Symptoms related to psychological distress and somatic pain, such as Bone/Joint Aches (70.0% relief), Yawning (70.4% relief), and Anxiety or Irritability (58.3% relief), also showed Extremely Significant improvement ( $P<0.0001$ ). The therapy was well-tolerated, and no adverse reactions or significant changes in safety laboratory parameters were observed.

## E. Conclusion

The combined regimen of *Kaktinduk Vati* and *Mansayadi Choorna* provides a safe, highly acceptable, and effective Ayurvedic module for the management of the acute phase of opioid withdrawal. This approach successfully addresses the *Vata Prakopa* and *Agni Mandya* underlying the withdrawal syndrome, offering a valuable integrative pathway toward de-addiction and the enhancement of psychological stability (*Satva*).

## II. Introduction

### A. Historical Evolution and Contemporary Relevance of Opioid Dependence

Ayurveda, originating in the Vedic period, is founded upon a comprehensive, holistic framework for maintaining health and treating disease, utilizing concepts like *Dosha*, *Dushya*, *Mala*, *Srotasa*, and their pathological variations (*Vikruti*). From this perspective, the physician is encouraged to treat the underlying imbalance even when a precise nomenclature for the disease is unavailable, a principle that remains crucial in the face of evolving public health challenges. The system recognized the pathological impact of excessive lifestyle practices early on; for example, excessive alcohol consumption was codified as a pathological condition during the *Samhita* period, highlighting an initial awareness of lifestyle-induced disorders.<sup>i</sup>

Opium (*Ahiphena*), however, was introduced to India later (post-13th century), primarily for its medicinal benefits, but quickly gained notoriety for its potent psychoactive properties and potential for misuse. While classical texts did not describe opioid dependence as a formal disease, Ayurvedic physicians in the 19th century began documenting management protocols based on traditional principles of toxicology (*Agad Tantra*). Opium is classified in the *Rasatarangini* as *Upavisha* (less potent poison) under *Sthavara Visha* (plant/mineral poisons), reflecting its recognized toxicity.<sup>ii</sup>

Opioid dependence remains a devastating health and social crisis globally, yet the issue is amplified in specific communities in India. Surveys indicate that consumption is alarmingly high and deeply entrenched in the social and daily lives of villagers in the western districts of Rajasthan, including Jodhpur, Jalore, Pali, Barmer, and Jaisalmer. Epidemiological data suggests that approximately 80% of the male population in these areas is afflicted by opium addiction, leading to severe consequences, including chronic health issues and permanent physical disabilities such as paralysis. This epidemic requires concerted governmental and social efforts alongside robust therapeutic interventions.

### B. Conceptualizing Addiction: Modern and Ayurvedic Perspectives

#### B.1 Modern Etiopathology and Neurobiology

In modern medicine, addiction is defined as a primary, chronic, neurobiological disease, categorized in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5) as "substance use disorder". It is characterized by the 4 C's: Compulsion, Craving, Loss of Control, and continued Use despite Consequences.

Two critical pharmacological features underpin addiction: tolerance and physical dependence. Tolerance involves reduced responsiveness to a substance following repeated exposure, requiring increasingly larger doses to achieve the desired effect. This adaptation occurs as neuroadaptive changes compensate for the drug's effects, leading to disruptions in neurotransmitter systems (dopaminergic, GABAergic, glutamatergic). Physical dependence manifests when chronic use is stopped, triggering the withdrawal syndrome.<sup>iii</sup>

Chronic opiate use profoundly alters the brain's reward and motivation circuitry, specifically the mesolimbic dopamine system (VTA, nucleus accumbens, and prefrontal cortex), conditioning the brain to associate drug use with survival and pleasure. The subsequent neuroadaptation alters synaptic plasticity and stress response. When the drug is discontinued, withdrawal symptoms emerge anxiety, tremors, sweating, and GI distress, which are powerful motivators for relapse, thus establishing the neurobiological foundation of the addiction cycle.<sup>iv</sup>

## B.2 Ahiphena as Upavisha and its Gunas

The classification of opium as *Upavisha* in Ayurveda provides the framework for understanding its dual nature as both medicine and poison. Classical texts detail ten inherent properties (*Gunas*) of *Visha* (poison) that explain its rapid and destructive effects. These properties include: *Ruksha* (rough), *Ushna* (hot), *Tikshna* (sharp), *Sukshma* (subtle), *Ashu* (quick-acting), *Vyavayi* (pervasive), *Vikashi* (expansive), *Vishada* (clear), *Laghu* (light), and *Apaki* (non-digestible).<sup>v</sup>

Opium shares these qualities, allowing it to penetrate minute channels (*Sukshma*) and act systemically before digestion (*Vyavayi*). The properties of *Ashu* (quick action) and *Tikshna* (sharp potency) correlate directly with the rapid onset and intense systemic reach of opioids, explaining their potent effects and high addictive liability. In chronic misuse, these properties cause *Dhatu-shosha* (tissue wasting), *Madakruta* (intoxication), and *Punsatva Nashaka* (loss of virility). The consumption of the latex (*Aphukam* or *Ahiphenkam*), specifically, is described as *Shoshaka* (drying), *Grahi* (absorbent), *Kapha*-reducing, and strongly *Vata* and *Pitta*-aggravating, possessing *Ushna Virya* (hot potency) and *Katu Vipaka* (pungent post-digestive effect). These properties reinforce the systemic depletion and *Vata* imbalance observed in addiction.<sup>vi</sup>

## B.3 The Pathogenesis of Ahiphena Vyasan

From an Ayurvedic perspective, the addiction process originates with *Prajnaparadha* (error of judgment), wherein the individual knowingly misuses the substance. This initial misuse leads to *Okasatmya* (physiological adaptation) to the drug, a form of pathological tolerance. Chronic indulgence vitiates the balance of *Sattva*, leading to *Avara Sattva* (weak mental constitution), and severely impairs *Dhi* (intellect), *Dhṛti* (willpower), and *Smṛti* (memory).

The weakened psychological state allows the toxic *Gunas* of *Ahiphena* to vitiate the *Manovaha Srotas* (channels of the mind), leading to *Mano Vikara* (compulsion and loss of spiritual strength) and *Buddhi Vikara* (delusion and poor judgment). When the drug is abruptly discontinued, the neuro-adapted body experiences severe *Vata Prakopa*, resulting in withdrawal symptoms such as restlessness, tremors, pain (*Asthishoola*), and disturbed digestion. This intense discomfort compels the individual to resume opium use, perpetuating the vicious cycle of dependence, withdrawal, and relapse. The high prevalence of *Avara Satva* (66.67%) in the patient cohort highlights this critical psychological vulnerability.<sup>vii</sup>

## C. Rationale for Kaktinduk Vati and Mansayadi Choorna<sup>viii</sup>

The combined regimen was selected to address the multifaceted pathology of opioid withdrawal, acute autonomic hyperactivity, systemic *Vata* aggravation, and underlying psychological instability, through synergistic therapeutic actions.

### C.1 Kaktinduk Vati Rationale<sup>ix</sup>

*Kaktinduk Vati* primarily focuses on mitigating the somatic and autonomic hyperactivity caused by *Vata* aggravation, along with restoring compromised digestive function. The formulation is known for its *Vata-Kapha Shamaka* and *Dipana* (appetizer/digestive stimulant) properties. The inclusion of potent, yet detoxified (*Shodhita*), agents is key:

- **Shuddha Kuchala** (*Strychnos nux-vomica*) is traditionally used for *Vedanasthapana* (analgesia) and *Nadibalya* (nervine tonic). Its *Tikshna-Ushna* attributes

directly counter the inertia (*Tamas*) and coldness (*Sheeta Guna*) associated with chronic opium use, stabilizing neuromuscular irritability, tremors, and restlessness.

- **The *Trikatu* components (*Sunthi*, *Kali Marich*, *Pippali*)** are powerful *Deepana* (Agni-enhancing) and *Pachana* (digestive) agents. This action is crucial for reversing the opium-induced suppression of *Agni* and chronic constipation (*Krura Kostha*), thereby resolving gastrointestinal distress.
- The overall effect of *Kaktinduk Vati* is to reduce the primary physical discomfort that often drives immediate relapse, while stabilizing the neurological system.

## C.2 Mansayadi Choorna Rationale

*Mansayadi Choorna* is designed to address the profound psychological and neurological disturbances (vitiation of *Manovaha Srotas*). It is classically described as *Medhya* (nootropic), *Nidrajanaka* (sleep inducer), and *Avasadahara* (antidepressant), making it essential for psychological stabilization during withdrawal.

- ***Jatamansi* (*Nardostachys jatamansi*)** provides deep neuro-calming and *Hridya* (cardiac-supportive) action, essential for controlling anxiety, restlessness, and palpitations.
- ***Ashwagandha* (*Withania somnifera*)** acts as a *Balya* (strengthening) and *Rasayana* (rejuvenative) agent, countering the systemic depletion (*Dhatu Kshaya*) caused by chronic opium use, and enhancing stress tolerance.
- ***Khurasani Ajwain* (*Hyoscyamus niger*)** adds potent *Nidrajanana* and antispasmodic properties, directly relieving insomnia and acute agitation.

The formulation thus enhances *Satva* strength, stabilizes emotional balance, and promotes restorative sleep, essential prerequisites for long-term abstinence.

## D. Study Need and Context

Despite the high regional prevalence of *Ahiphena Vyasan* and ongoing governmental de-addiction efforts, conventional substitution therapies often present limitations regarding side effects and dependency risks. Previous Ayurvedic research has explored various formulations, but there remains a critical need for scientifically validated, integrative protocols using formulations that address the dual pathology of *Vata* aggression and *Satva* deficiency simultaneously. This exploratory single-arm study aimed to provide robust clinical evidence for the effectiveness, safety, and acceptability of the combined regimen of *Kaktinduk Vati* and *Mansayadi Choorna* in a population struggling with endemic opioid dependence.<sup>x</sup>

## III. Materials and Methods

### A. Study Protocol and Ethical Clearance

The clinical investigation was designed as a prospective, single-arm, interventional exploratory study, conducted over a fixed duration of 28 days. The study was rigorously reviewed and approved by the Institutional Ethics Committee (IEC) of DSRRAU, Jodhpur (IEC No.: DSRRAU/PGIA/IEC/22-23/652). Furthermore, the trial was prospectively registered with the Clinical Trials Registry–India (CTRI/2024/07/070011), ensuring full compliance with international ethical guidelines and transparency standards for clinical research.

### B. Patient Recruitment and Selection Criteria

A total of 30 clinically diagnosed patients were successfully enrolled and completed the trial (96.7% compliance rate), having been recruited from the OPD of DSRRAU, Jodhpur.

#### B.1 Inclusion Criteria

Patients were included if they met the following criteria:

1. Clinically diagnosed cases of Opium Addiction (*Afeem*, *Doda-Posta Vyasana*).

2. Presenting with mild (COWS score 5–12) to moderate (COWS score 13–24) withdrawal symptoms.
3. Age range between 16 and 60 years.
4. Willingness to provide written informed consent.

## B.2 Exclusion Criteria

Exclusion was based on the presence of major systemic illnesses (including Myocardial Infarction, Ischemic heart disease, Liver/Renal failure, or Cancer) or co-existing major psychiatric disorders.

## C. Pharmaceutical Standardization and Posology

The trial drugs, *Kaktinduk Vati* and *Mansayadi Choorna*, were prepared meticulously according to the Standard Operating Procedures (SOPs) specified in the classical reference texts, ensuring authenticity and quality control.

**Table 1: Ingredients and Dose of Trial Medicine**

Group	Medicine	Part Used	Dose	Anupana (Vehicle)	Duration
Single Arm (N=30)	<i>Kaktinduk Vati</i>	Prepared Pill (125 mg)	2 <i>Vati</i> BD (250 mg total BD)	Normal Water	28 Days
Single Arm (N=30)	<i>Mansayadi Choorna</i>	Prepared Powder	4 g BD (8 g total daily)	Normal Water	28 Days

## C.1 Kaktinduk Vati Preparation

The formulation derived from *Rasa Tantra Sara Evum Siddha Prayog Samgraha* includes 11 ingredients. Crucially, the chief ingredient, *Kuchala* (*Strychnos nux-vomica*), was subjected to *Shodhana* (purification) by frying the seeds in *Eranda Taila* (castor oil) until a lead-colored outer coat formed, reducing its intrinsic toxicity. The mixture was subsequently triturated (*Bhavana*) with *Nagarbel Patra Swarasa* (betel leaf juice) for 12 hours, incorporating *Karpoor* (camphor) and *Keshar* (saffron) in the later stages. Pills (*Vati*) of 125 mg each were prepared.<sup>xi</sup>

Table 1: Ingredients and Dose of Trial Medicine

- The *Kaktinduk Vati* ingredients include *Shuddha Kuchala* (420g), *Trikatu* components (*Sunthi*, *Kali Marich*, *Pippali*), *Triphala* (*Haritaki*, *Bibhitaki*, *Amla*), *Loban*, *Keshar*, and *Karpoor*.
- The *Mansayadi Choorna* formulation (from *Siddha Yoga Samgraha*) comprises *Jatamansi* (8 Parts), *Ashwagandha* (2 Parts), and *Khurasani Ajwain* (1 Part).

## D. Assessment Tools

### D.1 Primary Efficacy Endpoint

The primary objective was assessed using the **Clinical Opiate Withdrawal Scale (COWS)**, a validated clinical tool for quantifying the severity of opiate withdrawal symptoms. The COWS score measures 11 parameters, including Resting Pulse Rate, Sweating, Restlessness, Pupil Size, Bone or Joint Aches, Rhinorrhea or Tearing, GI Upset, Tremor, Yawning, Anxiety or Irritability, and Gooseflesh Skin. Patients were evaluated at baseline (BT) and at the end of the treatment period (AT).

**Table 2: Distribution of Key Ayurvedic Constitutional Factors (N=30)**

Total COWS Score	Severity of Withdrawal
5–12	Mild Withdrawal
13–24	Moderate Withdrawal
25–36	Moderately Severe Withdrawal
>36	Severe Withdrawal

## D.2 Objective Safety and Supportive Measures

For objective safety monitoring, haematological (CBC) and biochemical (LFT, Serum Creatinine, CUE) investigations were performed at BT and AT to assess the systemic impact and potential toxicity of the drugs. Additionally, a crucial aspect of the therapy involved psychological support and adherence to *Pathya–Apathya* (favorable/unfavorable diet and lifestyle advice), including the encouragement of *Laghu* (light), *Ushna* (warm) foods, cow’s milk, *Pranayama*, and avoiding mental stress or cold exposures.

## IV. Results

### A. Demographic and Ayurvedic Constitutional Profiles

A total of 30 patients completed the 28-day trial, demonstrating a high rate of compliance. The demographic analysis revealed a profile highly consistent with literature reporting opioid dependence patterns in this region.

#### A.1 Demographic Distribution

All enrolled patients (100%) were male. The addiction was more prevalent among the **rural population (60%)** and concentrated in the **26–35 years age group (50%)**, indicating that the substance use deeply affects the economically and socially active segment of the population. The majority of patients (83.33%) reported an addiction duration of 1–5 years, suggesting either a recent surge in initiation or that patients seek treatment relatively early in their addiction cycle. The most common forms consumed were *Doda* (56.66%) and raw opium (43.33%). Concurrent substance use was highly common, with 46.66% being smokers in addition to opium use.

#### A.2 Ayurvedic Profile of Vulnerability

The constitutional assessment provided crucial insight into the pre-existing vulnerabilities of the cohort, often preceding or accelerating the addiction process.

**Table 3: Efficacy of Combined Therapy on Individual COWS Parameters (N=30)**

Parameter	Dominant Category	N (%)
<i>Sattva</i> Strength	<i>Avara</i> (Low Mental Strength)	20 (66.67%)
<i>Sharirika Prakriti</i>	<i>Vata-Pitta</i>	17 (56.67%)
<i>Kostha</i> (Bowel)	<i>Krura</i> (Hard/Constipated)	18 (60%)
<i>Jaran Shakti</i> (Digestion)	<i>Madhyama</i> (Moderate)	18 (60%)

The dominant prevalence of ***Avara Sattva* (66.67%)** indicates that low mental resilience, poor stress coping mechanisms, and susceptibility to external influence are major psychological factors predisposing this population to dependence. The high incidence of ***Vata-Pitta Prakriti* (56.67%)** and ***Krura Kostha* (60%)** highlights the chronic aggravation of *Vata Dosha* and impaired digestion, which opium, being *Vata-aggravating*, exacerbates further. This combination of low psychological defense and physical instability necessitates treatments that are specifically *Vata-Shamaka* and *Satvavardhaka*.

## B. Primary Efficacy Outcome

The overall reduction in opioid withdrawal severity was measured by the **Total COWS score**. The mean COWS score decreased significantly from baseline to the end of treatment (AT).

### Overall Efficacy on Total COWS Score (N=30)

The total COWS score demonstrated a **70.17% overall relief**, confirming the exceptional effectiveness of the combined Ayurvedic intervention in managing the distress associated with opioid cessation. The *P*-value of <0.0001 confirms that this relief is statistically robust.

## C. Symptom-Specific Improvements (COWS Parameters)

Analysis of the 11 individual COWS parameters revealed that all measurable symptoms, except Gooseflesh Skin (which was not present in this cohort), achieved an Extremely Significant reduction in severity.

COWS Parameter	Mean Score (BT)	Mean Score (AT)	% Relief	P-value	Significance
Pupil Size	1.233	0.100	<b>91.8%</b>	<0.0001	ES
Resting Pulse Rate	1.033	0.167	<b>84.0%</b>	<0.0001	ES
Sweating	0.533	0.100	81.2%	0.0006	VS
GI Upset	2.633	0.667	<b>74.7%</b>	<0.0001	ES
Yawning	3.600	1.067	70.4%	<0.0001	ES
Bone or Joint Aches	2.667	0.800	70.0%	<0.0001	ES
Runny Nose/Tearing	1.833	0.600	67.3%	<0.0001	ES
Restlessness	2.000	0.667	66.7%	<0.0001	ES
Anxiety or Irritability	1.600	0.667	58.3%	<0.0001	ES
Tremor	1.867	0.833	55.3%	<0.0001	ES

The most pronounced improvements were consistently observed in autonomic symptoms, reflecting highly effective neuro-regulation. Pupil Size (91.8% relief) and Resting Pulse Rate (84.0% relief) demonstrated the greatest reduction in severity. Somatic symptoms like GI Upset (74.7% relief) and Bone or Joint Aches (70.0% relief) also reduced significantly. Even deeply ingrained psychological and fatigue-related symptoms, such as Anxiety/Irritability (58.3% relief) and Yawning (70.4% relief), showed substantial improvement, confirming the dual action of the formulations on both the *Sharirika* and *Manasika* domains.

## D. Safety Assessment

The pre- and post-treatment evaluation of objective laboratory parameters (CBC, LFT, Serum Creatinine, CUE) indicated that the formulations were safe and well-tolerated. No significant adverse changes were noted in hepatic or renal function, and there were no reported severe side effects or toxicity issues throughout the 28-day trial period. This reinforces the safety of using *Shodhita (purified)* herbal mineral preparations like *Kaktinduk Vati* in a clinical setting.

## V. Discussion

### A. Efficacy Synthesis and Autonomic Neuro-Regulation

The central finding of 70.17% overall relief in opioid withdrawal severity is highly clinically significant, providing strong support for the traditional Ayurvedic approach to substance dependence management. The rapid and marked reduction in withdrawal symptoms observed within the 28-day days confirms that the pharmacological properties of *Kaktinduk Vati* and *Mansayadi Choorna* effectively target the core neurobiological mechanisms of opioid abstinence.

The sharp decline in autonomic markers, particularly Pupil Size (91.8% relief) and Resting Pulse Rate (84.0% relief), is a critical indicator of therapeutic success. Opioid withdrawal is characterized by rebound hyperactivity of the sympathetic nervous system, mediated largely by the Locus Coeruleus, which drives symptoms like mydriasis, tachycardia, and excessive sweating. The highly concentrated efficacy in these areas suggests that the formulations exert a profound central *Vata-Shamaka* (Vata

pacifying) and neuro-regulatory effect, potentially modulating the excessive noradrenergic outflow similar to modern alpha-2 adrenergic agonists, but through a holistic poly-herbal mechanism. The calming (*Nidrajanaka*) properties of *Mansayadi Choorna* (*Jatamansi*, *Khurasani Ajwain*) combined with the neural stabilization provided by *Shuddha Kuchala* are instrumental in achieving this autonomic balance.

### **B. Restoring Metabolic Fire (Agni) and Eliminating Toxins (*Deepana-Pachana* and *Shodhana*)**

A major clinical challenge in opioid cessation is gastrointestinal distress, which often includes chronic constipation, a reflection of opium's *Grahi* (absorbent) and *Vata*-aggravating effects, resulting in *Krura Kostha*. The strong therapeutic effect observed in reducing GI Upset (74.7% relief) confirms the success of the *Deepana-Pachana* action inherent in the regimen.

The *Trikatu* components in *Kaktinduk Vati* (*Sunthi*, *Kali Marich*, *Pippali*) are potent stimulators of *Agni*. By restoring proper *Agni*, they facilitate *Vatanulomana* (correct downward movement of *Vata*), thereby resolving symptoms such as abdominal cramps, nausea, and poor appetite. This metabolic correction is fundamental because, in Ayurveda, true detoxification (*Shodhana*) and healing cannot proceed while *Agni* is suppressed. Furthermore, the relief in Bone or Joint Aches (70.0% relief) is attributed to the analgesic (*Vedanasthapana*) and *Vata-Shamaka* action of the formulation, addressing the *Vata* accumulation in *Asthi* and *Majja Dhatu* caused by the systemic drying (*Shoshaka*) effect of chronic opium use<sup>xiii</sup>.

### **C. Addressing Psychological Vulnerability and Enhancing *Satva***

The demographic profile revealed a significant constitutional vulnerability in the patient cohort, with 66.67% categorized as having **Avara Satva** (low mental resilience) and 56.67% having **Vata-Pitta Prakriti** (high emotional and mental instability). These findings establish that addiction in this population is profoundly rooted in psychological susceptibility, often initiated by *Prajnaparadha* and maintained by an inability to cope with stress (*Manovaha Srotas* vitiation).

While relief in psychological symptoms like Anxiety/Irritability (58.3%) and Restlessness (66.7%) was statistically robust, the percentage relief was comparatively lower than that of autonomic markers (e.g., Pupil Size at 91.8%). This clinical observation emphasizes that the pharmacological reversal of acute physical distress is faster than the fundamental restructuring of the *Manasika* domain required for long-term recovery.

*Mansayadi Choorna* specifically targets this psychological dimension through its *Medhya* (nootropic) and *Satvavardhaka* (mind-stabilizing) properties. *Jatamansi* and *Ashwagandha* function as natural adaptogens, supporting cognitive stability and emotional resilience. The therapeutic aim is to gradually counter the dominance of *Rajas* and *Tamas* in the mind, thus building enduring *Satva* strength to resist relapse triggers. This suggests that for sustained abstinence, the therapeutic action of the formulations must be seamlessly integrated with robust psychological counselling and lifestyle modifications (*Pathya Vihara*) to address the root cause of *Avara Satva*.

## **VI. Conclusion**

The present exploratory clinical study provides definitive scientific evidence supporting the hypothesis that the combined Ayurvedic regimen of *Kaktinduk Vati* and *Mansayadi Choorna* is highly effective in managing the acute manifestations of Opioid Withdrawal Syndrome (*Ahiphena Vyasan*). The therapy achieved a total COWS score reduction of 70.17% ( $P < 0.0001$ ), primarily by stabilizing sympathetic hyper-reactivity, restoring suppressed *Agni* and *Vata* balance, and addressing psychological distress. Crucially, the regimen demonstrated excellent safety and patient acceptability.

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