
**NON-ORGANIC INSOMNIA: FROM HYPERAROUSAL
PATHOPHYSIOLOGY TO HOMEOPATHIC INDIVIDUALIZED
MANAGEMENT – A NARRATIVE ANALYSIS**

*¹Jovitha J., ²Princy Merlin Mathew, ³Navina S.K, ⁴Ajitha I, ⁵Vishnupriya K,
⁶Diana R.

¹Pg Scholar, Department Of Psychiatry, Sarada Krishna Homoeopathic Medical College,
Kulasekharam, Kanyakumari, Tamil Nadu.

²Pg Scholar, Department Of Psychiatry, Sarada Krishna Homoeopathic Medical College,
Kulasekharam, Kanyakumari, Tamil Nadu.

³Pg Scholar, Department Of Psychiatry, Sarada Krishna Homoeopathic Medical College,
Kulasekharam, Kanyakumari, Tamil Nadu.

⁴Pg Scholar, Department Of Psychiatry, Sarada Krishna Homoeopathic Medical College,
Kulasekharam, Kanyakumari, Tamil Nadu.

⁵Pg Scholar, Department Of Psychiatry, Sarada Krishna Homoeopathic Medical College,
Kulasekharam, Kanyakumari, Tamil Nadu.

⁶Asso Prof & Hod, Department Of Psychiatry, Sarada Krishna Homoeopathic Medical
College, Kulasekharam, Kanyakumari, Tamil Nadu.

Article Received: 22 February 2026

***Corresponding Author: Jovitha J.**

Article Revised: 12 March 2026

Pg Scholar, Department Of Psychiatry, Sarada Krishna Homoeopathic Medical
College, Kulasekharam, Kanyakumari, Tamil Nadu.

Published on: 01 April 2026

DOI: <https://doi-doi.org/101555/ijrpa.7825>

ABSTRACT

Insomnia is a prevalent sleep disorder characterized by difficulty in initiating or maintaining sleep, or experiencing non-restorative sleep, resulting in impaired daytime functioning. The global prevalence ranges from 6–18% depending on diagnostic criteria. As per ICD-11, Non-organic insomnia is a functional disorder without any possible structural pathology and is associated with cognitive functions, neuroendocrine mechanisms, and emotional dysregulation. Contemporary research highlights hyperarousal—physiological, cortical, and cognitive-emotional as a central pathophysiological mechanism. Cognitive-behavioural therapy for insomnia (CBT-I) remains the first-line treatment. However, increasing interest exists in individualized homeopathic management for chronic insomnia. This narrative

review explores the hyperarousal model of insomnia, its neurobiological impacts, psychosocial contributors, and the role of individualized homeopathic therapeutics.

KEYWORDS: Non Organic Insomnia, Prevalence, ICD-11, Hyperarousal, CBT-I, Individualized Homoeopathic Treatment, Neurobiology, Psychosocial Contributors

INTRODUCTION

Insomnia is defined as difficulty in sleep initiation, sleep maintenance, or early morning awakening accompanied by impaired daytime functioning ^(4,10). It may present as a symptom or as an independent disorder. The prevalence ranges between 6–18%, according to diagnostic definitions ^(2,4).

Patients frequently report significant daytime impairments affecting quality of life and increasing healthcare utilization ⁽⁵⁾.



FIG 1: Daytime effects of insomnia.

CLASSIFICATION AND TYPES OF INSOMNIA

Insomnia may be classified based on:

- **Duration:** Acute (<1 month) or Chronic (>1 month) ⁽⁴⁾

- **Etiology:** Primary (non-organic) or Secondary (associated with medical, psychiatric, or substance-related causes) ⁽⁷⁾
- **Frequency and severity criteria** ⁽⁴⁾

Primary insomnia occurs without any medical cause and it affects about one-quarter of the adult population. Secondary insomnia is linked to chronic medical conditions, psychiatric disorders, medications, or circadian rhythm disturbances as mentioned in several articles ⁽⁷⁾.

EPIDEMIOLOGY AND RISK FACTORS

Insomnia is more common in women than men ⁽⁷⁾. Risk factors include:

1. Environmental and Occupational Factors

Shift work and night duties leading to circadian desynchronization.

2. Medical and Physiological Causes

Restless legs syndrome, sleep apnea, narcolepsy, chronic pain, CNS injury, and postoperative states.

3. Toxic and Substance-Related Factors

Antidepressants, caffeine, alcohol, and chronic substance abuse.

4. Behavioral Factors

Poor sleep hygiene, irregular routines, late meals, excessive screen exposure, and intellectual hyperactivity before bedtime ⁽⁷⁾.

5. Psychiatric and Psychological Factors

Major depressive disorder, anxiety disorders, schizophrenia, manic episodes, stress overload, rumination, interpersonal conflicts ^(7,9).

SYMPTOMS OF INSOMNIA

Common symptoms include ⁽¹⁰⁾:

- Difficulty falling asleep
- Frequent nocturnal awakenings
- Early morning awakening
- Daytime fatigue
- Memory impairment
- Slowed cognition and poor concentration
- Mood disturbances (anxiety, depression, irritability)
- Reduced occupational and social functioning

PATHOPHYSIOLOGY OF NON-ORGANIC INSOMNIA

1. Hyperarousal Model

The hyperarousal model is widely accepted as a central mechanism in insomnia pathogenesis

⁽¹¹⁾. Hyperarousal includes:

- **Physiological hyperarousal** (autonomic and neuroendocrine activation)
- **Cortical hyperarousal** (increased high-frequency EEG activity)
- **Cognitive-emotional hyperarousal** (rumination, worry, maladaptive beliefs) ^(11,12)

Chronic insomnia is associated with increased autonomic activity and somatized tension ⁽¹¹⁾.

The term “psychophysiological insomnia” reflects conditioned arousal responses to the sleep environment ⁽¹¹⁾.

2. Neuroendocrine Mechanisms

Stress activates:

- The sympathetic nervous system
- The hypothalamic-pituitary-adrenal (HPA) axis

Increased corticotropin-releasing hormone (CRH) secretion disrupts sleep regulation ^(7,12).

Insomnia is frequently associated with overactivity of the HPA axis, particularly in depressive and anxiety disorders ⁽⁷⁾.

3. GABA Dysfunction

Reduced gamma-aminobutyric acid (GABA) levels have been observed in insomnia, major depressive disorder, and anxiety disorders · Hypnotic agents such as benzodiazepines act by enhancing GABAergic transmission ⁽⁷⁾.

4. Cognitive Model of Insomnia

According to Harvey’s Cognitive Model, individuals with insomnia engage in repetitive thinking and maladaptive beliefs about sleep. These processes include:

- Worry about sleep loss
- Catastrophic interpretations
- Rumination regarding consequences ⁽⁹⁾.

CONSEQUENCES OF CHRONIC INSOMNIA

- Increased risk of mood disorders
- Impaired cognitive functions
- Metabolic disorders

- Cardiovascular morbidity
- Reduced quality of life ⁽⁵⁾

CURRENT MANAGEMENT APPROACHES

Cognitive Behavioural Therapy for Insomnia (CBT-I)

It includes ⁽⁶⁾

- Psychoeducation
- Relaxation therapy
- Sleep restriction
- Stimulus control
- Cognitive restructuring

CBT-I targets maladaptive cognitions and behaviors contributing to hyperarousal.

HOMEOPATHIC INDIVIDUALIZED MANAGEMENT

RUBRICS FROM KENT REPERTORY

SLEEP CHAPTER

1. Sleep, short
2. Sleep, sleeplessness, morning
3. Sleep, sleeplessness, night, after, 2-30 a.m.
4. Sleep, sleeplessness, noise, from slight
5. Sleep, unrefreshing, morning
6. Sleep, waking, frequent, midnight, before⁽¹³⁾

REMEDIES

1. ARSENICUM ALBUM: Sleep Disturbed, anxious, restless. Must have head raised by pillows. Sleeps with hands over head. Dreams are full of care and fear. Drowsy in morning⁽¹⁴⁾. Restless sleep. Dreams of death⁽¹⁵⁾⁽¹⁶⁾. Starting of the limbs when on the point of falling asleep. Sleeplessness, from anguish and restlessness, with tossing about (after midnight). Sleep anxious, unquiet⁽¹⁷⁾. Anxious, full of the fear of death, restlessness compelling them to frequently change their position⁽¹⁸⁾.
2. COFFEA CRUDA: Sleep: Wakeful; on a constant move. Sleeps till 3 am, after which only dozing. Wakes with a start, sleep disturbed by dreams. Sleepless, on account mental activity; flow of ideas, with nervous excitability⁽¹⁴⁾⁽¹⁵⁾⁽¹⁶⁾. The Coffea patient is quick to act and to think. So full of ideas that she lies awake nights making plans, thinking of a thousand things; utterly unable to banish the thoughts that flood the mind; hears the clocks on the

distant steeples.⁽¹⁷⁾ Insomnia is common. Inclination to lie down and to shut the eyes, without being able to sleep⁽¹⁸⁾.

3. NUX VOMICA: Cannot sleep after 3 am until towards morning; awakes feeling wretchedly. Dreams full of bustle and hurry.^(14,18) Goes to sleep late from crowding of thoughts on him.⁽¹⁶⁾ Sleepy in evening or sleepless from rush of ideas. Awakes too early; can't sleep again.⁽¹⁷⁾

4. OPIUM: Very sleepy, but cannot go to sleep. Distant noise, cocks crowing, etc, keep him awake.⁽¹⁴⁾ unrefreshing sleep.⁽¹⁵⁾ Sleepy but cannot sleep, sleepless with acuteness of hearing disturbed by sounds ordinarily not heard at all.⁽¹⁸⁾

DISCUSSION

Insomnia disorder represents a multifactorial condition with strong neurobiological, psychological, and behavioral determinants. The hyperarousal framework combines all three autonomic functions, cortical enhancement and emotional components. While CBT-I remains evidence-based first-line therapy, individualized homeopathic management offers a holistic framework including predispositions and psychosomatic interactions.

CONCLUSION

Non-organic insomnia is understood through the hyperarousal activity involving neuroendocrine activation, cortical excitation, and cognitive-emotional dysregulation. Effective management requires both physiological and psychological components.

REFERENCES

1. Cooper KL, Relton C. Homeopathy for insomnia: A systematic review of research evidence. *Sleep Med Rev.* 2010;14(5):329-37.
2. Michael J, Singh S, Sadhukhan S, Nath A, Kundu N, Magotra N, et al. Efficacy of individualized homeopathic treatment of insomnia: Double-blind, randomized, placebo-controlled clinical trial. *Complement Ther Med.* 2019;43:53-9.
3. Aphale P, Sharma D, Shekhar H. Efficacy of homeopathic higher dilutions in management of sleep disorders: A review. *Int J High Dilution Res.* 2024;23(cf):102-20.
4. Mai E, Buysse DJ. Insomnia: Prevalence, impact, pathogenesis, differential diagnosis, and evaluation. *Sleep Med Clin.* 2008;3(2):167-74.
5. Frase S, Domschke K, Feige B, Hosp J, Lahmann C, Spiegelhalder K, et al. Daytime performance in insomnia patients. *J Sleep Res.* 2025.
6. Spiegelhalder K, Johann AF, Benz F. Insomnia disorders. *Psychosom Med.* 2026;215-21.

7. Amihăesei IC, Mungiu OC. Main neuroendocrine features and therapy in primary sleep troubles. *Rev Med Chir Soc Med Nat Iasi*. 2012;116(3):862-6.
8. Dollander M. Etiology of adult insomnia. *Encephale*. 2002;28(6):493-502.
9. Palagini L, Moretto U, Dell’Osso L, Carney C. Sleep-related cognitive processes, arousal, and emotion dysregulation in insomnia disorder. *Sleep Med*. 2017;30:97-104.
10. Cleveland Clinic. *Insomnia*. 2023.
11. Riemann D, Spiegelhalder K, Feige B, Voderholzer U, Berger M, Perlis M, et al. The hyperarousal model of insomnia. *Sleep Med Rev*. 2010;14(1):19-31.
12. Levenson JC, Kay DB, Buysse DJ. The pathophysiology of insomnia. *Chest*. 2015;147(4):1179-92.
13. Kent JT, Clara Louise Kent. *Repertory of the homoeopathic materia medica*. Noida: B. Jain Publishers (P) Ltd; 2016.
14. Boericke W. *Pocket Manual Of Homoeopathic Material Medica & Repertory*. New Delhi: B.Jain; 2007.
15. Boger CM. *A Synoptic Key Of The Material Medica*. 1916.
16. Kent JT. *Lectures On Homoeopathic Material Medica*. 1905.
17. Lippe AD. *Textbook Of Material Medica*. B. Jain Publishers; 2003
18. Clarke JH. *A Dictionary Of Practical Material Medica*. 1902.