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Anxiety and Sleep: A Bidirectional Clinical Relationship

Narrative Clinical Review

Abstract—Anxiety and disturbed sleep commonly reinforce one another. Worry, threat monitoring, bodily arousal, nightmares, and avoidance can delay or fragment sleep; insufficient or irregular sleep can heighten emotional reactivity, concentration problems, bodily sensations, and perceived inability to cope. This narrative clinical review examines that bidirectional relationship without assuming that either problem is always primary. Assessment should distinguish insomnia disorder from curtailed sleep opportunity, circadian disturbance, obstructive sleep apnea, restless legs syndrome, parasomnia, medication or substance effects, mood episodes, trauma-related sleep disturbance, and anxiety about sleep itself. A targeted history, medication review, two-week sleep diary, and disorder-specific measures can clarify the pattern and indicate when further sleep or medical evaluation is needed. Cognitive behavioral therapy for insomnia is first-line care for chronic insomnia in adults and can be coordinated with evidence-based treatment for an anxiety disorder. Stimulus control, carefully prescribed sleep restriction or compression, cognitive and behavioral work, and relapse planning are more effective than generic sleep-hygiene advice alone. Medication requires individualized review of benefit, interactions, dependence, respiratory risk, pregnancy, and next-day impairment. Household responses also matter: a partner can support agreed changes without becoming a monitor or guarantor of sleep. A communication-focused formulation can help patients and clinicians clarify nocturnal sensations, predictions, reassurance requests, and practical constraints. The aim is flexible sleep behavior, less conditioned arousal, safe treatment, and restored daytime function rather than forced or perfect sleep.

Index Terms—anxiety, insomnia, sleep, hyperarousal, CBT-I, exposure, circadian rhythm, psychotherapy

I. INTRODUCTION

Sleep is an involuntary biological process that is strongly influenced by behavior, timing, environment, health, and expectation. Anxiety is a prospective state organized around

possible threat. When they interact, the bed can become a place for monitoring: “Will I sleep?” “How will I function tomorrow?” “What if this sensation is dangerous?” Efforts to guarantee sleep increase attention and effort at precisely the time when reduced monitoring would be helpful. A poor night then supplies bodily sensations and cognitive errors that make the next day feel less manageable and the next night more threatening.

The association is not merely anecdotal. Longitudinal meta-analysis indicates bidirectional relations between insomnia, anxiety, and depression, although effect sizes and definitions vary (Alvaro et al., 2013). Reviews also find that sleep disturbance is common across anxiety-related conditions and may predict poorer course (Cox & Olatunji, 2016, 2020). These findings do not identify one universal causal chain. Pain, caregiving, shift work, poverty, medication, substance use, respiratory disease, mood disorder, and environmental danger can affect both sleep and anxiety.

Across longitudinal studies, insomnia has also predicted later mental disorders at the group level (Hertenstein et al., 2019). Prediction is not destiny and does not show that insomnia is the sole cause; it supports early assessment and treatment without catastrophizing an individual night.

Earlier JPCC articles discussed chronic insomnia that had not responded to initial care and anxiety that persisted after treatment (Haverkamp, 2016; Haverkamp, 2017a, 2017b). The present review updates those discussions by emphasizing differential assessment, first-line behavioral treatment for chronic insomnia, diagnosis-specific anxiety care, and cautious use of sleep medication. “Treatment resistant” should not be assigned before verifying the diagnosis, the treatment delivered, adherence, timing, opportunity for sleep, and conditions that continue to disturb it.

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Core clinical propositions (author-developed summary; nonvalidated)

- Anxiety can disturb sleep, and disturbed sleep can intensify anxiety; neither direction should be assumed without assessment.
- Chronic insomnia is more than an occasional short night and is not defined by a laboratory sleep duration alone.
- Time in bed is not the same as time asleep; extending time in bed can sometimes strengthen wakefulness and frustration.
- CBT-I is a multicomponent first-line treatment, not a synonym for sleep-hygiene advice.
- Sleep restriction is a clinical procedure with contraindications and safety considerations, not a self-imposed race to sleep less.
- New, severe, or atypical symptoms require medical and psychiatric differential diagnosis.

II. SCOPE AND METHOD

This narrative clinical review considers professional guidelines, systematic reviews, meta-analyses, and selected primary studies available through 30 November 2022. Search concepts included anxiety disorders, insomnia, sleep continuity, circadian rhythm, hyperarousal, emotional regulation, CBT-I, stimulus control, sleep restriction, hypnotics, antidepressants, benzodiazepines, sleep apnea, and treatment resistance. Priority was given to guidance from the American Academy of Sleep Medicine, the American College of Physicians, NICE, and European insomnia experts, along with quantitative syntheses. It is not a systematic review and does not provide individualized medication instructions.

III. SLEEP REGULATION AND ANXIOUS AROUSAL

Sleep timing can be understood through interacting homeostatic and circadian processes. Sleep pressure generally builds with sustained wakefulness and dissipates during sleep, while the circadian system promotes sleep and wakefulness according to internal timing influenced by light and behavior. A person can therefore feel exhausted yet physiologically mistimed for sleep. Irregular rising times, long daytime naps, shift work, evening light, or travel can alter the relationship between these systems.

Anxiety adds cognitive and physiological arousal. Worry keeps attention oriented toward future problems; muscular tension and autonomic activation make quiet wakefulness feel unsafe; repeated clock checking converts elapsed time into evidence of impending failure. Hyperarousal is a useful descriptive concept in insomnia, but it should not be treated as a single proven cause. Some patients report mental activity without marked physiological activation; others experience pain, breathlessness, hot flushes, or medication effects that are not reducible to worry.

Sleep is also learned in context. If the bed repeatedly contains wakefulness, work, arguments, scrolling, checking, and frustrated attempts to sleep, the bedroom can become a

cue for arousal. Stimulus control reverses this association by linking bed with sleep rather than prolonged struggle. The rationale is behavioral, not moral. A patient is not failing because sleep cannot be commanded.

A. Emotional regulation after sleep loss

After curtailed or fragmented sleep, patients often report greater irritability, lower frustration tolerance, impaired concentration, and stronger bodily discomfort. These changes can make a feared situation feel less manageable. A lapse of attention at work may be interpreted as evidence of collapse; dizziness from fatigue may be misread as panic; ordinary disagreement may feel more threatening. The resulting avoidance reduces opportunities for corrective learning and may increase time available for worry.

Group-level experimental and observational findings support links between sleep and emotional reactivity, but clinical translation should remain modest. A single short night does not inevitably cause an anxiety disorder, and catastrophic teaching about the harms of lost sleep can itself intensify insomnia. The relevant message is that sleep and anxiety are modifiable, interacting processes—not that every imperfect night creates damage. Anxiety involves interacting cognitive, behavioral, and physiological processes; uncertainty and cumulative stress can heighten anticipatory arousal, but neither mechanism alone establishes a diagnosis (Craske et al., 2017; Grupe & Nitschke, 2013; McEwen, 2007).

IV. A BIDIRECTIONAL MAINTENANCE CYCLE

The cycle often begins before bedtime. A difficult day increases worry; the person cancels exercise or social contact because of fatigue; daytime sleep reduces homeostatic pressure; evening work delays winding down; and the person enters bed early to “catch up.” When sleep does not arrive, effort rises. The clock is checked, breathing is controlled, and consequences are mentally calculated. Eventually the person sleeps, but the morning alarm is delayed and the schedule shifts. Each step is understandable, yet the sequence can maintain the problem.

Anxiety disorders contribute different content. Generalized worry becomes nocturnal problem solving. Panic disorder creates fear of palpitations, breathlessness, or loss of control during sleep onset. Social anxiety turns the quiet period into post-event review of conversations and prediction of tomorrow's scrutiny. OCD can involve checking doors, appliances, body sensations, or the “rightness” of a bedtime ritual. Trauma-related symptoms can include nightmares, fear of vulnerability, and conditioned arousal in darkness. Health anxiety can make normal transitions in breathing or consciousness feel dangerous.

Sleep disturbance then modifies treatment behavior. Fatigue may increase missed appointments, reduce exposure practice,

or make medication side effects harder to tolerate. A patient may conclude that anxiety treatment cannot begin until sleep is perfect. Conversely, every symptom may be attributed to insomnia, delaying treatment of panic, depression, mania, trauma, or substance use. A parallel rather than sequential formulation is often preferable.

Table 1. Anxiety–sleep cycles and intervention targets (author-developed narrative synthesis; nonvalidated)

Cycle	Immediate relief	Longer-term process	Potential target
Going to bed very early after a poor night	More opportunity to rest	More wakeful time in bed and conditioned arousal	Stabilize wake time and calibrate time in bed
Clock checking	A sense of monitoring and control	Converts wakefulness into repeated threat information	Remove clock from view and review beliefs about consequences
Repeated relaxation tests	Brief decrease in tension	Makes sleep depend on successful performance	Use relaxation flexibly, not as a pass–fail requirement
Daytime cancellation and napping	Conserves energy now	Lowers sleep pressure and shrinks valued activity	Plan safe daytime activity and limited naps when indicated
Substance use at night	Faster sedation or emotional numbing	Fragmentation, tolerance, rebound, interaction, or dependence	Assess use and provide appropriate treatment
Partner reassurance	Comfort and connection	Repeated certainty seeking about sleep or safety	Validate distress and follow an agreed response plan
Extending rituals	Feeling “ready enough” for sleep	Delays bedtime and strengthens compulsive rules	ERP or behavioral experiment when clinically indicated

V. DEFINING THE CLINICAL PROBLEM

An occasional poor night is universal. Insomnia disorder involves persistent difficulty initiating sleep, maintaining sleep, or waking earlier than desired despite adequate opportunity and circumstances, with daytime consequences. Frequency and duration criteria differ slightly by diagnostic system and research definition, but chronicity, opportunity, and impairment are essential (American Psychiatric Association, 2022; Riemann et al., 2017). A patient may underestimate or overestimate sleep, yet subjective distress remains clinically relevant.

Insufficient sleep opportunity is different. A person working two jobs, caring for an infant, staying online until 02:00, or living in a noisy or unsafe environment may not have

insomnia in the narrow sense. The intervention must address constraints where possible. Advising such a person to improve sleep hygiene without acknowledging housing, caregiving, or labor conditions can be invalidating and ineffective.

Hypersomnolence, irregular schedules, and circadian delay also require distinction. Someone who sleeps adequately from 03:00 to 11:00 but cannot sleep from 23:00 to 07:00 may have a timing problem rather than a failure to generate sleep. Bright light, melatonin timing, and schedule adjustment are phase-dependent; imprecise self-treatment can shift rhythms in the wrong direction. Specialist advice may be warranted.

VI. DIFFERENTIAL ASSESSMENT

A sleep complaint deserves a structured history. The clinician asks about usual bedtime, attempted sleep time, estimated sleep latency, awakenings, final wake time, rising time, naps, schedule variation, and daytime function. A two-week diary reveals patterns obscured by recall. Consumer wearables can provide trends, but they are not equivalent to polysomnography and may increase monitoring in a patient preoccupied with sleep metrics.

The medical review includes pain, respiratory symptoms, reflux, nocturia, endocrine symptoms, pregnancy and menopause where relevant, neurological disease, and medications. Snoring, witnessed apneas, choking, morning headaches, hypertension, and daytime sleepiness raise concern for obstructive sleep apnea. An urge to move the legs with unpleasant sensations at rest suggests restless legs syndrome. Dream enactment, sleepwalking, seizures, and unusual nocturnal behavior need appropriate evaluation.

Psychiatric assessment includes the anxiety syndrome, depression, trauma symptoms, OCD, substance use, psychosis, and bipolar-spectrum symptoms. A reduced need for sleep with increased energy, activity, confidence, speech, or impulsivity is not ordinary insomnia and can signal mania or hypomania. Suicidal thinking can worsen at night and requires direct assessment. Sedatives, alcohol, cannabis, stimulants, caffeine, nicotine, corticosteroids, decongestants, and other agents can affect sleep; timing and dose changes matter.

Polysomnography is not routinely required to diagnose uncomplicated chronic insomnia. It is indicated when another sleep disorder is suspected, when events require characterization, or according to specialist judgment. Laboratory testing should be driven by history rather than used indiscriminately. The aim is neither to medicalize every poor night nor to miss treatable conditions.

Table 2. Differential questions in anxiety with disturbed sleep (author-developed narrative synthesis; nonvalidated)

Possibility	Clues	Next clinical step
Chronic insomnia	Persistent difficulty despite opportunity, conditioned arousal, daytime impairment	Sleep diary and CBT-I assessment
Restricted opportunity	Work, caregiving, environment, or chosen schedule leaves too little time	Address practical constraints and priorities
Circadian rhythm disorder	Stable sleep at a later or earlier phase, large weekday–weekend shift	Timing history and sleep/circadian expertise
Obstructive sleep apnea	Snoring, witnessed apneas, choking, sleepiness, cardiometabolic risk	Medical or sleep evaluation; do not rely on sedatives
Restless legs syndrome	Urge to move, worse at rest/evening, relieved by movement	Medical review, medication and iron assessment as appropriate
Trauma-related sleep disturbance	Nightmares, hypervigilance, fear of vulnerability, trauma cues	Trauma-informed assessment and evidence-based care
OCD or anxiety ritual	Checking, reassurance, rigid “perfect sleep” rules, feared sensations	Disorder-specific formulation and exposure/response prevention
Mood episode	Reduced need for sleep with increased energy or severe depressive symptoms	Prompt psychiatric assessment
Substance or medication effect	Temporal link to caffeine, alcohol, cannabis, stimulants, withdrawal, or prescription change	Collaborative review; avoid abrupt unsafe changes
Parasomnia or nocturnal seizure	Complex behavior, injury, amnesia, stereotyped events	Specialist assessment and environmental safety

VII. MEASUREMENT WITHOUT OVERMONITORING

A sleep diary records behavior and estimates rather than demanding exact sleep measurement. Core fields are time into bed, attempted sleep time, estimated latency, awakenings, final awakening, time out of bed, naps, substances, and daytime function. From these, time in bed and estimated sleep efficiency can be calculated. The diary supports decisions; it should not become a nightly examination.

The Insomnia Severity Index can track perceived severity and impairment, while disorder-specific anxiety measures can monitor the parallel syndrome. Scores are not diagnoses. A clinically meaningful outcome may include less time

struggling in bed, more stable rising, resumed activity, fewer panic interpretations, and reduced dependence on rescue medication even before total sleep time changes substantially.

Patients often ask for the exact number of hours they need. Population recommendations are useful, but individual need and opportunity vary. A rigid target can worsen performance anxiety. Treatment instead seeks restorative sleep and daytime functioning within a stable schedule, while respecting occupations and conditions in which fatigue creates acute safety risk. A brief validated measure such as the GAD-7 can support repeated assessment of anxiety severity, but scores require clinical interpretation and should not replace a diagnostic interview (Spitzer et al., 2006).

VIII. COGNITIVE BEHAVIORAL THERAPY FOR INSOMNIA

Clinical guidelines recommend multicomponent CBT-I as first-line treatment for chronic insomnia in adults (Edinger et al., 2021; Qaseem et al., 2016; Riemann et al., 2017). Meta-analysis supports improvements in sleep onset, wake after sleep onset, and sleep efficiency, with benefits that can persist after treatment (Trauer et al., 2015). Delivery may be individual, group, or digitally supported, depending on complexity and access. A diagnosis of anxiety does not remove the indication; it may require coordination and additional support.

CBT-I is frequently misrepresented as a list of rules. Sleep hygiene—light, activity, caffeine, environment, and routine—can remove obstacles but is usually not an adequate stand-alone treatment for chronic insomnia. The active program commonly includes stimulus control, sleep restriction or compression, cognitive interventions, relaxation used appropriately, and relapse prevention. The clinician explains the rationale and reviews diary data rather than issuing generic prohibitions.

A. Stimulus control

Stimulus control strengthens the association between bed and sleep. The usual principles are to go to bed when sleepy, not merely tired; reserve the bed for sleep and consensual sexual activity; leave it when wakefulness becomes prolonged and activating; return when sleepy; and keep a stable rising time. Implementation must be adapted for mobility limitations, fall risk, caregiving, shared rooms, disability, and environmental safety.

The instruction to leave bed is not a stopwatch rule. Clock watching can intensify arousal. The cue is sustained wakefulness with frustration or alertness. The alternative location should be safe, dimly lit, and relatively unengaging. A patient with panic about leaving the bedroom may require a graded plan rather than abrupt implementation.

B. Sleep restriction and compression

Sleep restriction therapy initially aligns time in bed more closely with estimated sleep time, then expands it as sleep becomes more consolidated. The term can be alarming; “sleep scheduling” or “sleep compression” may better convey the aim. It is not deliberate chronic sleep deprivation. A minimum time in bed is normally used, and the schedule is adjusted with clinical monitoring.

This component has important safety considerations. Excessive sleepiness can impair driving, operating machinery, balance, and decision making. Bipolar disorder, seizure disorders, parasomnias, pregnancy, unstable medical illness, and untreated sleep apnea may require modification or specialist coordination. Occupations with safety-critical duties need particular caution. Patients should not improvise an extreme schedule from a brief description in an article.

Anxiety can make the protocol feel counterintuitive: the person fears too little sleep and is asked to spend less time attempting it. Collaborative explanation is essential. The intervention reduces wakeful struggle and increases homeostatic sleep pressure. Daily functioning and sleepiness are monitored, and the plan is changed if risk emerges.

C. Cognitive and metacognitive work

Common sleep beliefs include “I must get eight hours,” “Tomorrow will be ruined,” “If I do not control my thoughts I will not sleep,” and “Wakefulness means something is medically wrong.” Cognitive work examines probability, evidence, coping, and the effect of the belief on behavior. The aim is not to guarantee a good night. A more workable stance may be: “Sleep matters, and one poor night is difficult but survivable; I can follow the plan without forcing the outcome.”

Scheduled problem solving can move actionable concerns out of bed. At an earlier time, the person distinguishes problems with a next step from hypothetical worry. The next step is recorded; unsolvable uncertainty is acknowledged rather than mentally rehearsed. This is compatible with treatment for generalized anxiety, but worry procedures should be coordinated so that the patient does not receive conflicting instructions.

Paradoxical intention and mindfulness-based approaches may be useful for selected patients by reducing sleep effort and struggle. They should not be presented as tricks that guarantee sleep, which would recreate performance pressure. Relaxation can lower arousal, but if it becomes a ritual repeated until sleep feels certain, its function needs review.

D. Relapse prevention

Sleep naturally varies with illness, travel, grief, caregiving, and stress. Relapse prevention normalizes limited variation and defines early corrections: resume a stable wake time,

avoid large compensatory extensions, restore stimulus control, reduce clock checking, and seek review when symptoms persist. A brief poor period does not require restarting the most restrictive schedule without assessment.

A clinically supervised CBT-I sequence (author-developed summary; nonvalidated)

- Establish diagnosis, sleep opportunity, risk, and comorbid sleep, medical, psychiatric, and substance conditions.
- Collect a sleep diary and agree on meaningful daytime outcomes.
- Explain homeostatic pressure, circadian timing, conditioned arousal, and the role of sleep effort.
- Introduce stimulus control and a stable rising time adapted to the person's circumstances.
- Prescribe sleep restriction or compression only with appropriate safety screening and monitoring.
- Address catastrophic beliefs, nocturnal problem solving, and rigid compensatory behavior.
- Coordinate with treatment for anxiety, pain, trauma, or another active condition.
- Expand time in bed when indicated and create a written plan for normal setbacks.

IX. TREATING THE ANXIETY DISORDER

Sleep treatment does not replace diagnosis-specific anxiety care. Cognitive-behavioral therapy for anxiety may include psychoeducation, cognitive work, exposure to situations or sensations, reduction of safety behaviors, and relapse planning. Antidepressant medication may be appropriate depending on the disorder, preference, prior response, comorbidity, and risk (National Institute for Health and Care Excellence, 2020). The plan should clarify whether sleep is a treatment target, a treatment barrier, or both.

Exposure is often postponed because the patient is tired. Temporary modification may be sensible when there is acute safety risk, but indefinite delay can reinforce the belief that action is possible only after perfect sleep. The clinician can grade difficulty, schedule practice when alertness is relatively better, avoid driving-based tasks during unsafe sleepiness, and review learning rather than performance. Exposure may also affect sleep indirectly by reducing avoidance and daytime inactivity; this is a clinical hypothesis to monitor, not an established effect.

For panic, nocturnal sensations may become exposure targets after medical assessment. For social anxiety, post-event processing at bedtime can be shifted into a bounded review earlier in the evening. For OCD, bedtime checking and ‘just-right’ rituals may require OCD-specific assessment and exposure and response prevention; this is a diagnosis-specific clinical extrapolation rather than evidence established by the sleep studies reviewed here. Plans should be coordinated so that reassurance or a highly detailed sleep routine does not strengthen compulsive rules.

Trauma-related nightmares and hypervigilance may need trauma-focused or nightmare-specific treatment. Standard CBT-I can be helpful, but instructions should account for safety and trauma triggers. A patient who genuinely lives in danger cannot be asked simply to reinterpret vigilance. Environmental safety and social intervention may be prerequisites. Meta-analytic evidence supports cognitive behavioral therapy across anxiety and related disorders, while also showing substantial variation by disorder, comparison condition, and study design (Carpenter et al., 2018; Hofmann et al., 2012).

X. MEDICATION AND SUBSTANCE CONSIDERATIONS

Medication decisions are individualized and should follow an adequate diagnostic review. The American Academy of Sleep Medicine pharmacologic guideline made drug-specific, generally weak recommendations based on the evidence available and emphasized clinical judgment (Sateia et al., 2017). This is not equivalent to recommending medication before CBT-I. The American College of Physicians recommended CBT-I as initial treatment and shared decision making about short-term medication when CBT-I alone is insufficient (Qaseem et al., 2016).

Benzodiazepines and benzodiazepine-receptor agonists can reduce sleep latency or improve continuity for some patients, but risks include next-day impairment, falls, memory effects, tolerance, dependence, withdrawal, interaction with alcohol or opioids, and respiratory concerns. Abrupt cessation after regular use can be dangerous. Long-term continuation should be reviewed rather than assumed, and any taper must be individualized and supervised.

Sedating antidepressants, antihistamines, antipsychotics, melatonin-related agents, and other drugs have distinct indications and harms. Sedation is not evidence that a medicine treats the cause of insomnia. Off-label prescribing requires a clear rationale, monitoring, and discussion of alternatives. Antipsychotics should not be used casually for uncomplicated insomnia because of their adverse-effect burden.

Medication for an anxiety disorder can change sleep. Selective serotonin reuptake inhibitors may initially cause activation, insomnia, somnolence, or vivid dreams; timing and titration can be reviewed. A beneficial anxiety response may improve sleep later. Conversely, a hypnotic can mask a persistent circadian or respiratory problem without resolving it. Treatment effects should be tracked across both symptoms.

Alcohol may shorten perceived sleep onset but tends to fragment sleep later and carries dependence and interaction risks. Cannabis effects vary by product, dose, timing, tolerance, and withdrawal; evidence does not justify treating it

as a simple insomnia solution. Caffeine has a long and variable effect, and nicotine is stimulating. The tone of assessment should be curious rather than punitive so that actual use is reported.

Table 3. Medication and substance questions (author-developed narrative synthesis; nonvalidated)

Question	Clinical reason
What is the exact agent, dose, timing, frequency, and duration?	Names such as “sleeping tablet” conceal different pharmacology and risk
What outcome improved and by how much?	Sedation, sleep continuity, daytime function, and anxiety may change differently
What adverse effects or next-day impairment occur?	Driving, falls, memory, work safety, and quality of life matter
Is use escalating or difficult to reduce?	Tolerance, dependence, or rebound may be present
What happens with missed doses?	Withdrawal and recurrence require distinction
Are alcohol, opioids, antihistamines, or other sedatives combined?	Combined impairment and respiratory risk may rise
Could another sleep disorder be untreated?	Sedation does not treat apnea, restless legs, or circadian misalignment
Is pregnancy, older age, respiratory disease, or another vulnerability relevant?	Risk–benefit balance and options change

XI. THE HOUSEHOLD AND THE BED PARTNER

Sleep unfolds in a shared environment. A partner's schedule, snoring, movement, caregiving, temperature preferences, and device use can disturb either partner. Anxiety can add repeated questions about whether the patient slept, whether breathing sounded normal, or whether the next day will be manageable. In response, the partner may soothe, monitor, or sacrifice sleep to remain available. Mapping that exchange helps the partners decide what is practical support and what has become anxiety-driven monitoring.

Joint planning can clarify environmental changes and reassurance boundaries. Separate beds for part or all of a treatment period can be a practical choice rather than evidence of relationship failure, provided both partners discuss meaning and connection. Conversely, insisting on separation without considering fear, disability, culture, or intimacy may be counterproductive. The criterion is whether the arrangement supports sleep, safety, and the relationship.

Parents of infants, caregivers, shift workers, and patients living in crowded housing may be unable to follow textbook schedules. Treatment should adapt to those constraints without blame. Protected recovery periods, shared duties, light timing,

noise management, or social support may be more realistic than a full CBT-I protocol until sleep opportunity improves.

XII. COMMUNICATION-FOCUSED FORMULATION

A communication-focused formulation asks how nocturnal information is selected and translated. A benign bodily change may become “I am in danger”; wakefulness may become “Tomorrow is lost”; a partner's sleep may become “I am alone with this.” The response—checking, waking the partner, searching online, or repeating a routine—communicates urgency back to the person and household. Haverkamp (2017a) proposed Communication-Focused Therapy (CFT) for anxiety and panic as an author-developed model for exploring such processes. It should supplement, not displace, established insomnia and anxiety treatments.

The model can be operationalized. Record the event, interpretation, emotion, request, response, immediate change, and delayed consequence. Then test an alternative communication. Instead of “Tell me I will be fine tomorrow,” the person might say, “I am frightened and want company for five minutes; after that I will follow the wakeful-bed plan.” Instead of arguing that sleep is guaranteed, a partner might validate the difficulty and refer to the agreed protocol. The intervention targets the exchange, not the legitimacy of needing comfort.

Internal language also matters. Commands such as “sleep now” turn an involuntary process into a performance, while permission to rest without proving sleep may reduce struggle. Therapy can examine this self-directed communication and help the patient discuss nocturnal needs with a partner without making either person responsible for guaranteeing sleep. These are clinical hypotheses, not a semantic cure; persistent insomnia still requires the behavioral and medical assessment described above.

XIII. WHEN INITIAL TREATMENT DOES NOT WORK

Before labeling insomnia or anxiety treatment resistant, verify what was delivered. Was CBT-I multicomponent or only a handout on sleep hygiene? Was time in bed calculated from a diary? Were safety and adherence reviewed? Was exposure actually conducted, or discussed without practice? Was an adequate medication trial taken at a tolerated dose, and what outcome was measured? Haverkamp (2016, 2017b) emphasized individualized reassessment in persistent insomnia and anxiety; contemporary guidance strengthens the need to detect pseudoresistance.

Revisit diagnosis and maintaining context. Untreated apnea, restless legs, circadian disorder, pain, mania, alcohol use, stimulant timing, domestic disturbance, or caregiving can defeat a technically sound plan. Severe fear of sleep, trauma, perfectionism, or compulsive monitoring may need targeted

work. Digital CBT-I may be adequate for uncomplicated presentations but insufficient when risk and comorbidity are high.

If a treatment was adequate and unsuccessful, options include strengthening fidelity, changing delivery format, coordinating disorders rather than sequencing them indefinitely, or seeking specialist sleep and psychiatric review. More medication is not automatically the next step. Nor should lack of response be attributed to motivation without examining burden, access, adverse effects, and whether the rationale made sense to the patient.

XIV. DISORDER-SPECIFIC COORDINATION

Generalized anxiety disorder. Bedtime can make hypothetical problem-solving more salient. A scheduled earlier planning period can produce written next steps, while repetitive uncertainty is postponed rather than argued with in bed. The plan must leave a genuine place for caregiving, unstable work, and other real responsibilities; otherwise postponement becomes avoidance rather than treatment.

Panic disorder. Sleep-onset changes in breathing, muscle tone, and awareness may trigger monitoring, while nocturnal panic can be confused with nightmares, apnea, reflux, arrhythmia, or seizures. New or atypical events require medical and sleep assessment. When panic has been established, planned interoceptive work may address feared sensations and checking; it should not be improvised during an unexplained acute event.

Social anxiety disorder. Post-event review can occupy the period after social contact, and anticipatory rehearsal can displace sleep. A bounded review asks what was predicted, what was observed, which safety behaviors occurred, and what alternative information was available, then ends. Behavioral experiments can test whether limited preparation and ordinary imperfection produce the feared outcome.

Obsessive-compulsive symptoms. Bedtime checking, reassurance, and ‘just-right’ routines may require coordinated CBT-I and OCD-specific treatment so that generic sleep advice does not become another compulsion.

Trauma-related presentations. Darkness, dreams, and loss of vigilance may cue trauma responses. Establish actual safety and monitor dissociation before adapting CBT-I or adding trauma-focused or nightmare-specific care; sleep restriction should not be applied mechanically when the environment remains dangerous.

Table 4. Coordinating sleep and anxiety targets (author-developed narrative synthesis; nonvalidated)

Presentation	Coordinated clinical focus and caution
Generalized worry	Move practical planning earlier; distinguish action from repetitive hypothetical worry.
Panic	After medical assessment, coordinate interoceptive work with CBT-I; do not treat new nocturnal events as panic by default.
Social anxiety	Bound post-event review and test predictions without sacrificing necessary preparation.
OCD	Coordinate CBT-I with OCD-specific assessment and ERP; prevent sleep routines from becoming compulsions.
Trauma	Establish actual safety and monitor dissociation before adapting CBT-I or adding trauma/nightmare work.
Health anxiety	Evaluate genuine symptoms first, then reduce repeated monitoring or reassurance when it maintains fear.

XV. DAYTIME CONDITIONS FOR NIGHTTIME SLEEP

Sleep treatment extends through the day. A stable rising time anchors behavior and light exposure. Morning or daytime light supports circadian timing, while bright evening light can delay it in susceptible people. Timing matters; advice to seek or avoid light should account for the person's schedule and suspected phase rather than assume one universal prescription.

Meals, caffeine, nicotine, alcohol, and medication timing can affect arousal and continuity. The clinician asks about actual quantity and timing rather than telling the patient to avoid everything enjoyable. A caffeine reduction trial can be gradual to reduce withdrawal headache. Changes in prescribed medication should be coordinated with the prescriber.

Daytime avoidance also matters. After a poor night, canceling every activity may lower demand and reinforce the prediction that functioning is impossible. A graded plan retains safe, important activities and postpones only those with genuine fatigue risk. This creates corrective information and protects circadian and homeostatic processes.

XVI. WHAT TO DO DURING A DIFFICULT NIGHT

The patient benefits from a simple, pre-agreed response rather than constructing a new strategy at 03:00. If wakefulness is calm, remaining in bed briefly may be

reasonable. If alertness and frustration persist, stimulus control suggests moving to a safe, dim location and returning when sleepy. The clock remains out of view.

Problem-solving material is noted briefly for the next scheduled period, not resolved during the night. Relaxation or mindfulness may be used to rest, but neither should be repeated as a test of whether sleep will occur. A partner follows the agreed reassurance plan. New severe physical or psychiatric symptoms are handled according to the safety plan, not treated as insomnia.

The following day, the person rises near the planned time and preserves safe activity. Driving and hazardous work are reconsidered if sleepy. The poor night is recorded without an emergency extension of the entire schedule. Treatment changes are discussed in daylight with the clinician rather than improvised through extra medication.

XVII. SAFETY

Excessive sleepiness creates immediate risk in driving, machinery use, clinical work, and other safety-sensitive tasks. Patients should receive concrete guidance appropriate to their occupation and local law. Sleep restriction should be modified or paused when risk cannot be controlled. Falls risk matters for patients who must leave bed during the night.

New chest pain, severe breathlessness, syncope, neurological symptoms, or other acute physical concerns should not be presumed to be anxiety. Reduced need for sleep with escalating energy or impulsivity, severe depression, psychosis, suicidal intent, dangerous substance withdrawal, and severe self-neglect require prompt assessment. General educational material cannot determine urgency for an individual.

XVIII. COMMUNICATING ABOUT SLEEP WITHOUT INCREASING FEAR

Sleep education can inadvertently heighten a patient's sense of threat. Lists of cardiovascular, cognitive, immune, and psychiatric consequences can be presented without absolute risk, duration, or individual context. A patient with insomnia may hear that every short night is causing permanent damage, which increases monitoring and sleep effort. Accurate education should state that chronic sleep problems deserve care while normal variation and occasional short sleep are common.

Language about "sleep debt" can help explain accumulated pressure but may imply an exact account that must be repaid hour for hour. Recovery is more flexible. The clinician emphasizes stable opportunity and daytime safety rather than a compulsory arithmetic catch-up. Similarly, "deep sleep" and "sleep score" from consumer devices should not become performance grades.

When a patient reports no sleep at all, arguing that unrecognized sleep probably occurred is rarely helpful. The clinician can acknowledge the patient's experience of the night, use diary estimates, and focus on function and behavior. Objective testing is reserved for an indicated differential, not used to prove that distress is mistaken.

Partners and clinicians should avoid treating sedation as equivalent to restorative sleep. Ask whether sleep continuity, alertness, cognition, mood, and function improved and what adverse effects occurred. A drug-induced loss of awareness with next-day impairment may not meet the patient's goal.

Public advice also needs context. Recommendations about screens, exercise, meals, and bedroom conditions describe influences, not moral rules. A patient who needs a phone for on-call care or who lives in one room requires adaptation. The principle is to reduce avoidable arousal and strengthen consistent cues within actual circumstances.

Table 5. Reframing common sleep messages (author-developed narrative synthesis; nonvalidated)

Threatening or rigid message	More accurate clinical message
"You must get eight hours."	Sleep need varies; treatment seeks adequate opportunity, restorative function, and a stable pattern.
"Every lost hour damages the brain."	Chronic sleep disturbance matters, but occasional variation is common and catastrophizing can worsen insomnia.
"Never use a screen at night."	Light and engaging content can delay sleep; modify timing and intensity in a feasible way.
"Stay in bed and try harder."	Sleep is involuntary; when wakefulness becomes activated, stimulus control can rebuild the bed-sleep association.
"Your wearable proves your sleep is bad."	Consumer estimates can show trends but do not diagnose insomnia or replace clinical assessment.
"Medication fixed the sleep."	Review continuity, next-day function, adverse effects, and the condition the medication is targeting.

XIX. LIMITATIONS AND RESEARCH NEEDS

Insomnia studies differ in diagnostic criteria, comparator, delivery, follow-up, and comorbidity. Self-reported sleep and actigraphy measure different aspects; polysomnographic change may not parallel subjective benefit. Anxiety studies often treat sleep as a secondary outcome, while insomnia trials may not characterize anxiety disorders fully. Average effects do not reveal the best sequence for a particular comorbid patient.

More work is needed on integrated treatment, safety adaptations for sleep restriction, diverse occupational and

cultural contexts, and long-term medication outcomes. Communication patterns around sleep are clinically salient but less directly tested than CBT-I components. The communication formulation offered here should therefore generate measurable hypotheses rather than be presented as established efficacy evidence.

XX. CONCLUSION

Anxiety and sleep disturbance can reinforce one another through arousal, prediction, conditioned cues, avoidance, irregular scheduling, and repeated attempts at control. Assessment should establish sleep opportunity, pattern, anxiety diagnosis, medical and psychiatric differential, substances, medication, and safety. CBT-I is first-line care for chronic insomnia and should be coordinated with evidence-based anxiety treatment. Medication may have a role after individualized risk-benefit discussion but does not replace diagnosis or behavioral care. Partners and households can support change without becoming monitors or guarantors. Recovery does not require forcing perfect sleep. It involves rebuilding conditions under which sleep can occur, reducing fear of wakefulness, and restoring daytime action even when some uncertainty remains.

XXI. DISCLOSURES

Conflicts of interest—The author developed Communication-Focused Therapy and has related publications. It is identified here as an author-developed supplementary framework and is not presented as a replacement for CBT-I or established anxiety treatment. No other conflicts were reported.

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