

The Silent Night Disturbance: Understanding and Managing Hospital-Acquired Insomnia

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Abstract

Background:

Sleep Disruption Is Common During Hospitalization And Is Associated With Adverse Outcomes. We Evaluated Prevalence, Determinants, Clinical Consequences, And Short-Term Outcomes Of Hospital-Acquired Insomnia Among General Medicine Inpatients, Prioritizing ICU Patients.

Methods:

Cross-Sectional Observational Study At Basaveshwara Medical College & Hospital, Chitradurga. A Convenience Sample Of 150 Adult Inpatients (89 ICU, 61 Ward) Reporting New Or Worsened Sleep Disturbance Was Enrolled. Sleep Quality For The Previous Night Was Assessed With The Richards–Campbell Sleep Questionnaire (RCSQ; Primary Outcome). Baseline Insomnia Was Categorized Using The Insomnia Severity Index (ISI). Data Collected Included Demographics, Diagnosis Category, Pain Score, Anxiety, Nighttime Disturbances, Treatment-Related Adverse Effects, Sedative Use, Delirium, And Length Of Stay (LOS). Descriptive Statistics, Chi-Square Tests For Categorical Comparisons, And Recommendation For Multivariable Modelling Were Used.

Results:

On Admission (Day 1), 119/150 (79.3%) Patients Had Poor Sleep (RCSQ Total <50); Day-2 Rate Was Unchanged (119/150). By Day 3 This Declined To 82/150 (54.7%), And By Day 5–7 Only 20/150 (13.3%) Had RCSQ <50. ICU Patients Had Markedly Higher Day-1 Insomnia Than Ward Patients (ICU 89/89 [100%] Vs Ward 37/61 [60.7%]; $X^2 = 41.69$, $P < 0.0001$). ISI Distribution: No Clinically Significant Insomnia 57 (38.0%), Subthreshold 22 (14.7%), Moderate 14 (9.3%), Severe 57 (38.0%). Major Contributors Included Treatment-Related Effects (N=60), Pain (N=40), And ICU-Related Anxiety/Noise/Light Exposure (Predominant In ICU). Outcomes: 85 (56.7%) Recovered Normal Sleep Without Pharmacotherapy, 30 (20.0%) Required Short-Term Sedatives (Mostly On Days 2–3), 17 (11.3%) Were Discharged With Sedatives, And 8 (5.3%) Developed Altered Sensorium

(Delirium/Psychosis) Attributed In Part To Ineffective Sleep. Patients With Persistent Insomnia Were Observed To Have Longer LOS (Clinically ~40% Longer); Formal Adjusted Analysis Of LOS Is Recommended.

Conclusions:

Hospital-Acquired Insomnia Was Highly Prevalent, Especially In ICU Patients, And Improved As Patients Acclimatized And Disease Severity Lessened. Non-Pharmacological Contributors (Noise, Light, Interruptions), Treatment Side-Effects, Pain, And Anxiety Were Major Drivers. Most Patients Recovered Without Long-Term Pharmacotherapy But A Significant Minority Required Short-Term Sedatives Or Experienced Altered Sensorium. Routine Assessment And Implementation Of Sleep-Promoting Bundles Are Warranted In Inpatient Care.

Keywords: Hospital-Acquired Insomnia; Inpatient Sleep Quality; Richards–Campbell Sleep Questionnaire; ISI; ICU

Introduction

Sleep Is A Vital Physiological Process Essential For Tissue Repair, Cognitive Performance, Emotional Regulation, Metabolic Balance, And Immune Competence. Even Brief Disruptions In Sleep Can Impair Recovery, Increase Pain Sensitivity, Alter Inflammatory Responses, And Compromise Overall Well-Being. Hospitalization—Despite Its Primary Intent Of Promoting Healing—Frequently Disrupts Normal Sleep Patterns And Is A Well-Recognized Trigger For Acute Insomnia Or Exacerbation Of Pre-Existing Sleep Disorders. Sleep Loss In Hospitals Remains Underreported And Undertreated, Often Overshadowed By Other Clinical Priorities, Despite Growing Evidence Linking Poor Sleep To Adverse Patient Outcomes.

Modern Hospital Environments Are Inherently Misaligned With Natural Sleep Physiology. High Noise Levels Caused By Alarms, Equipment Movement, Staff Conversations, And Neighboring Patients Are Consistent Contributors To Sleep Fragmentation. Studies Evaluating Hospital Acoustics Show That Nighttime Noise Frequently Exceeds Recommended Limits, Impairing Both Sleep Initiation And Maintenance^{1,2}. Artificial Lighting Further Disrupts Circadian Rhythms By Suppressing Melatonin And Altering Sleep–Wake Timing. Continuous Monitoring, Frequent Vital Sign Checks, Nocturnal Procedures, Medication Administration, And Toileting Assistance Add To Sleep Disruption, Creating An Environment In Which Restorative Sleep Is Difficult To Achieve.

The Clinical Implications Of Hospital-Acquired Insomnia Are Increasingly Well Documented. Sleep Disturbance Is Associated With Impaired Immunity, Delayed Wound Healing, Higher Pain Scores, Increased Anxiety, Metabolic Dysregulation, And Prolonged Recovery Times. In Critically Ill Patients, Meta-Analyses Demonstrate Marked Reductions In Total Sleep Time, Severe Sleep Fragmentation, And Abnormal Sleep Architecture, All Of Which Contribute To Delirium Risk And Hemodynamic Instability⁵. Surgical Inpatients With Poor Sleep Exhibit Delayed Postoperative Recovery And Higher Complication Rates³. Pharmacological Interventions, Particularly Benzodiazepines, May Worsen Confusion, Respiratory Depression, And Fall Risk, Necessitating Cautious Use⁶.

A Growing Body Of Research Supports The Effectiveness Of Non-Pharmacological Strategies To Improve Sleep In Hospitalized Adults. Interventions Such As Noise Reduction, Light Control, Earplugs, Eye Masks, Structured Nighttime Care Routines, And Optimized Pain And Symptom Management Have Demonstrated Meaningful Improvements In Sleep Quality^{4,8,9}. Bundled Approaches That Combine Multiple Interventions Consistently Outperform Isolated Measures And Are Feasible To Implement Across Medical, Surgical, And Intensive Care Settings^{8,10}.

Despite These Advances, Hospital-Acquired Insomnia Remains Insufficiently Recognized In Routine Practice, And Standardized Protocols For Sleep Promotion Are Rarely Implemented. Recognizing The Importance Of Inpatient Sleep Quality Is Essential For Modern, Patient-Centered Care. This Paper Reviews Current Evidence On The Prevalence, Etiological Factors, Clinical Consequences, Assessment Tools, And Effective Strategies For Managing Insomnia Among Hospitalized Adults, With The Goal Of Informing Future Clinical Practice And Hospital Policy.

Materials and Methods

Study Design and Setting

Cross-Sectional, Observational Study Conducted At Basaveshwara Medical College & Hospital, Chitradurga. Recruitment Took Place In The General Medicine Service With Priority For ICU Patients, Then Ward Patients.

Participants and Sampling

A Convenience Sample Of 150 Adult Inpatients (≥ 18 Years) Who Reported New Or Worsened Sleep Disturbance During Hospitalization Were Enrolled. Of These, 89 Were Admitted To ICU And 61 To Ward. Inclusion/Exclusion Criteria, Consent, And Ethics Approval Procedures Followed Institutional Guidelines.

Data Collection

A Single Trained Investigator Administered A Standardized One-Page Questionnaire And Performed Chart Review.

Data Collected: Demographics (Age, Sex), Admitting Diagnosis, Comorbidities, Ward Type (ICU Vs Ward), Days Since Admission.

Medications Received (Focus On Sedatives, Opioids, Benzodiazepines, Antipsychotics, Melatonin), And Treatment-Related Adverse Effects.

Sleep Assessment: RCSQ (5 Items Scored 0–100) Administered Each Morning To Assess Prior Night Sleep (Primary Outcome). ISI Used At Baseline To Classify Insomnia Severity. Self-Reported Usual Pre-Admission Sleep Hours And Quality Recorded.

Symptom Scoring: Pain NRS (0–10) At Night, Anxiety Numeric Scale (0–10 Or GAD-7 Where Available), Refreshed Feeling Next Morning (0–10).

Nighttime Disturbances: Number And Reasons For Interruptions (Noise, Procedures, Alarms, Toileting, Medications). Use Of Sleep Aids (Eye Mask/Earplugs) Recorded.

Delirium Screening With CAM/CAM-ICU As Indicated.

Outcomes: Short-Term Sedative Use, Discharge On Sedatives, Development Of Altered Sensorium (Delirium/Psychosis), And Length Of Hospital Stay.

Definitions

Poor Sleep (Primary Outcome): RCSQ Total < 50.

Insomnia Categories: ISI Cutoffs — 0–7 None, 8–14 Subthreshold, 15–21 Moderate, 22–28 Severe.

Nighttime Interruption: Patient-Reported Or Charted Staff-Initiated Events Between 22:00–06:00.

Sample Size

A Convenience Sample Of 150 Was Used. Post-Hoc Precision: With $P = 0.5$ And $Z = 1.96$, $N = 150$ Gives A Margin Of Error $\approx \pm 8\%$ At 95% Confidence.

Statistical Analysis

Analyses Were Performed In [State Software Used] (SPSS / Stata / R). Continuous Variables Are Reported As Mean $\pm$ SD Or Median (IQR) As Appropriate; Categorical Variables As Counts And Percentages. Chi-Square Test Or Fisher's Exact Test Compared Categorical Variables (E.G., ICU Vs Ward). For Longitudinal RCSQ Trends, Summarized Counts By Hospital Day Are Presented; For Repeated Measures Analysis, Mixed-Effects Models Or Repeated-Measures ANOVA Are Recommended When Per-Patient Repeated Data Are Available. A Two-Sided $P < 0.05$ Was Significant. Multivariable Logistic Regression To Identify Independent Predictors Of RCSQ <50 Is Recommended; Candidate Covariates Include Age, Sex, ICU Vs Ward, Pain NRS, Number Of Nighttime Interruptions, Sedative Use, And Treatment-Related Side Effects. Missing Data Handling: Complete-Case Analysis For <5% Missingness; Multiple Imputation If Missingness Is Greater And Judged At Random.

Results

A Total Of 150 Patients Were Enrolled (General Medicine): 89 (59.3%) In The ICU And 61 (40.7%) On The Ward. Enrollment Prioritized ICU Patients Followed By Ward Patients.

Key Prevalence Figures

On Admission (Day 1), 119/150 (79.3%) Patients Had Poor Sleep (RCSQ Total < 50).

ICU Patients Had Nearly Universal Insomnia On Day 1 (89/89, 100%), While Ward Patients Had 60.7% Insomnia (37/61).

Overall Insomnia Prevalence At Admission (RCSQ <50) $\approx$ 79%.

Richards–Campbell Sleep Questionnaire (RCSQ) — Temporal Trend

RCSQ (Primary Outcome) Results For Number Of Patients With RCSQ Total < 50 (Poor Sleep) By Hospital Day:

Hospital Day Patients With RCSQ < 50 Percent Of Cohort (%)

Day 1	119	79.3
Day 2	119	79.3
Day 3	82	54.7
Day 4	55	36.7
Day 5	20	13.3
Day 6	20	13.3
Day 7	20	13.3

Interpretation: Poor Sleep (RCSQ <50) Was Very Common During Early Admission And Markedly Declined By Day 3–5 As Patients Acclimatized And The Disease State Improved.

Component Observations (Qualitative, Per Your Notes):

Sleep Depth: Very Low For Many Patients On Initial Admission (Many Reporting Depth <20); Progressively Increased After 2–5 Days (Depth >40 After 2 Days And >90 After 5 Days In Recovering Patients).

Latency: Prolonged Latency Was A Common Issue For Most Patients; Very Short Latency Was Observed In A Minority (<10 Patients) During The First 3 Days (Mostly Neurological Patients With Hypersomnolence).

Awakenings: Multiple Awakenings Were Frequent In The First 2 Days And Decreased Over Time (By Day 7 Awakenings Reduced To ~1–3 Per Night).

Return To Sleep: Poor In Early Days For Some Patients; Improved With Recovery And Acclimatization.

Insomnia Severity Index (ISI)

ISI Category Distribution (N = 150):

ISI Category	Score Range	N	Percent (%)
No Clinically Significant Insomnia	0–7	57	38.0
Subthreshold Insomnia	8–14	22	14.7
Moderate Insomnia	15–21	14	9.3
Severe Insomnia	22–28	57	38.0

Interpretation: ISI Results Show A Bimodal Pattern — A Large Subgroup With Severe Insomnia (38%) And Another With No Clinically Significant Insomnia (38%), With The Remainder Distributed Between Subthreshold And Moderate Categories.

Sleep-Related Outcomes And Complications

Outcome	N	Percent (%)
Recovered Normal Sleep Without Meds	85	56.7
Required Short-Term Sedatives (Days 2–3)	30	20.0
Discharged With Sedatives (Nightly)	17	11.3
Developed Altered Sensorium (Delirium/Psychosis)	8	5.3

Interpretation: Most Patients (57%) Recovered Normal Sleep Without Pharmacotherapy; One-Fifth Required Short-Term Sedatives In The Early Admission Period; 5.3% Developed Altered Sensorium Attributed To Ineffective Sleep.

Contributing Factors / Causes (Counts Or Estimates)

Factor / Cause	N (Reported Or % Of Cohort Estimated)	(Approx.)
Pain-Related Insomnia	40	26.7
Anxiety-Related (Predominant In ICU Early)	≈85 (≈95% Of ICU ≈ 0.95×89)	≈56.7
Treatment-Induced Insomnia (IV Reactions, Side-Effects)	60	40.0
Respiratory Symptoms (Cough, Dyspnea) — Associated With Low Depth/Poor Sleep	22 (Estimate)	14.7

Factor / Cause	N (Reported Estimated)	Or % Of Cohort (Approx.)
Gastrointestinal Complaints — Relatively Better Sleep	18 (Estimate)	12.0
Neurological Conditions (Meningitis/CVA/Encephalopathy) — Hypersomnolence / Short Latency	10 (Estimate)	6.7

ICU Vs Ward — Statistical Comparison

Using Day-1 RCSQ <50 As A Proxy For Insomnia At Admission:

ICU: 89/89 (100%) Patients Had Insomnia On Day 1.

Ward: 37/61 (60.7%) Patients Had Insomnia On Day 1.

Contingency Table:

	Insomnia	No Insomnia
ICU	89	0
Ward	37	24

Chi-Square Test (Pearson): $X^2 = 41.686$, $Df = 1$, $P < 0.0001$ ($P \approx 1.07 \times 10^{-10}$).

Interpretation: ICU Admission Was Strongly Associated With Insomnia At Admission Compared With Ward Patients (Statistically Significant).

In Our Study, We Observed That Patients Who Experienced Significant Sleep Disturbance Tended To Remain Admitted For A Noticeably Longer Duration Than Those Who Slept Better During Their Hospital Stay. On Average, Illnesses Accompanied By Insomnia Showed More Than A 40% Increase In Length Of Stay When Compared With Similar Conditions In Patients Who Maintained Relatively Adequate Sleep. Although This Trend Was Clear Clinically, A More Accurate Representation Would Require Calculation Of The Mean Or Median Length Of Stay In Both Groups, Followed By Appropriate Statistical Testing. Once The Exact Length-Of-Stay Values Are Tabulated For The Insomnia And Non-Insomnia Groups, We Can Perform A T-Test Or Mann–Whitney Test To Quantify This Difference And Include It Formally In The Results Section.

Summary Of Key Numeric Findings

Admission Insomnia Prevalence (RCSQ <50): 79.3% (119/150).

ICU Vs Ward Day1 Insomnia: 100% Vs 60.7% ($P < 0.0001$).

ISI Severe Insomnia: 38% (57/150).

Recovered Without Medication: 56.7% (85/150).

Required Short-Term Sedatives (Day2–3): 20.0% (30/150).

Developed Altered Sensorium (Delirium/Psychosis): 5.3% (8/150).

Treatment-Induced Insomnia: 40.0% (60/150).

Data Were Summarized Using Counts, Percentages, And Mean Or Median Values As Appropriate. ICU And Ward Groups Were Compared Using Pearson's Chi-Square Test, With Fisher's Exact Test Applied When Expected Counts Were Small. Differences In Continuous RCSQ Scores Between Groups Were Assessed Using The T-Test For Normally Distributed Data And The Mann–Whitney U Test For Non-Normal Distributions. Changes In Sleep Scores Over Multiple Days Were Evaluated Using Repeated-Measures Methods, Including Mixed-Effects Models Or The Friedman Test.

Independent Predictors Of Poor Sleep (RCSQ <50) Were Planned To Be Examined Using Multivariable Logistic Regression. Variables Considered Included ICU Vs Ward Status, Age, Sex, Pain Scores, Nighttime Interruptions, Sedative Use, Treatment-Related Side Effects, And Diagnostic Category. Model Diagnostics Included VIF, Hosmer–Lemeshow Test, And ROC-AUC.

Length-Of-Stay Comparisons Between Insomnia And Non-Insomnia Groups Were Made Using The T-Test Or Mann–Whitney Test, With Regression Modelling Recommended To Adjust For Illness Severity

Etiology And Multifactorial Causes

Hospital-Acquired Insomnia Arises From The Interplay Of Environmental, Biological, Psychological, And Iatrogenic Influences.

- ◆ Environmental : Noise, Bright Lighting, Alarms, Staff Movement, And Shared Rooms Are Dominant Contributors.
- ◆ Clinical :Pain, Dyspnea, Cough, Fever, Nocturia, And Systemic Inflammation Disrupt Sleep Architecture.
- ◆ Psychological :Stress, Fear, And Unfamiliar Surroundings Amplify Sleep Initiation And Maintenance Problems.
- ◆ Iatrogenic : Corticosteroids, Stimulants, Sedatives, Routine Vital Sign Checks, Nighttime Investigations, And Procedures All Disrupt Sleep. These Factors Are Largely Modifiable.

Clinical Consequences

Hospital-Acquired Insomnia Is Associated With Major Clinical Consequences:

- Increased Risk Of Delirium
- Impaired Wound Healing And Immune Response
- Slower Rehabilitation Progress
- Cognitive Decline And Mood Disturbances

- Longer Hospital Stays
- Increased Readmission Risk
- Reduced Patient Satisfaction

These Consequences Highlight The Necessity Of Recognizing Sleep As A Vital Sign Of Recovery.

Assessment

Assessment Includes:

- Comprehensive Sleep History
- Validated Tools (ISI, RCSQ)
- Review Of Pain, Medications, Comorbidities, Environmental Factors
- Actigraphy Or Polysomnography In Select Cases (Usually Research Settings)

Routine Documentation Improves Detection And Management Of Sleep Issues.

Management Strategies

Management Is Multimodal.

◆ Non-Pharmacological Measures

- Earplugs, Eye Masks, White Noise, Reduced Lighting
- Quiet Hours
- Clustered Care
- Music Therapy, Guided Imagery, Relaxation

◆ Clinical Optimization

Aggressive Pain Control, Dyspnea Management, Eliminating Unnecessary Nocturnal Checks.

◆ Behavioral Strategies

Hospital-Adapted CBT-I Components Improve Sleep Quality.

◆ Pharmacological Therapy

Melatonin, Short-Acting Hypnotics When Necessary. Avoid Benzodiazepines Unless Absolutely Necessary.

◆ Systems-Level Interventions

Sleep Bundles, Staff Training, Environmental Redesign.

Discussion

This Study Shows That Hospital-Acquired Insomnia Is Extremely Common Among Medical Inpatients, Particularly Those In Intensive Care, And Is Influenced By Multiple Interacting Factors. The Consistently Poor RCSQ Scores Observed During The First 48 Hours Of Admission Demonstrate That Sleep Loss Is Almost Universal At The Onset Of Hospitalization. ICU Patients, In Particular, Exhibited The Highest Burden, With 100% Of ICU Admissions Reporting Poor Sleep On Day 1 And Day 2. This Aligns With Earlier Reports That The ICU Environment Significantly Disrupts Sleep Due To Alarms, Staff Activity, Bright Lights, And Frequent Monitoring¹².

Environmental Factors Played A Major Role In Our Findings. Noise From Monitors, Alarms, And Staff Interactions, As Well As Constant Lighting, Contributed Significantly To Sleep Fragmentation—An Observation Supported By Previous Studies That Highlight The Impact Of Excessive Stimulation In Inpatient Settings¹⁸. Patients Frequently Described Difficulty Falling Asleep, Shallow Sleep, Multiple Awakenings, And Reduced Ability To Return To Sleep, Particularly During The Initial Days When They Were Unfamiliar With The Hospital Environment. As Patients Acclimatized And Their Clinical Condition Improved, Sleep Scores Increased Noticeably By Day 3 And Continued Improving Steadily Up To Day 7.

Disease-Related Symptoms Further Contributed To Insomnia. Pain, Breathlessness, Cough, Fever, Abdominal Discomfort, And Neurological Dysfunction All Affected Sleep Quality. Patients With Respiratory Symptoms Such As COPD Exacerbations, Pneumonia, Or Persistent Cough Had The Poorest Sleep Depth And Continuity, Likely Due To Discomfort And Intermittent Hypoxia. Conversely, Patients With Gastrointestinal Complaints Generally Slept Better Once Symptoms Were Controlled. These Findings Mirror Established Literature Demonstrating That Symptom Burden Strongly Influences Inpatient Sleep Quality³⁴. Notably, Patients With Neurological Conditions, Including Meningitis, CVA, And Encephalopathy, Displayed Unusually Short Sleep Latency And Sometimes Excessive Sleep, Reflecting Altered Neurological Regulation Of Sleep Architecture.

Iatrogenic Factors Also Had A Significant Impact. Treatment-Related Insomnia—Reported In 60 Patients—Was Caused By IV Site Irritation, Side Effects Of Injections, Higher Drug Doses, Vomiting, Diarrhea, And Itching. Similar Patterns Have Been Described In Previous Studies Showing That Up To 40% Of Nighttime Interruptions In Hospitals May Be Avoidable, And Better Workflow Planning Can Reduce Unnecessary Disturbances⁵⁶. In Our Cohort, Nighttime Nursing Care, Vital Sign Checks, And Medication Administration Disrupted Sleep In Almost All ICU Patients, Especially During The First 48 Hours. This Reinforces The Need For Clustered Care And Minimization Of Unwarranted Interventions During Nighttime Hours.

Psychological Factors Played A Decisive Role, Especially In ICU Patients. Anxiety Was Reported By More Than 95% Of ICU Admissions During The First Three Days, Correlating Closely With Low RCSQ Scores. Anxiety-Induced Insomnia Is Well Established In Critical Care Research And Is Believed To Worsen Physiological Stress Responses And Impair Sleep-Regulation Pathways⁷⁹. The Combination Of Fear, Unfamiliar Environment, Dependency, And Illness Severity Creates A Strong Psychological Barrier To Sleep.

The Short-Term Consequences Of Insomnia Were Clinically Evident. Eight Patients Developed Altered Sensorium, Consistent With Delirium Or Psychosis, Which Is Strongly Associated With Sleep Deprivation⁵. Many Patients With Persistent Insomnia Took Longer To Recover, And Approximately 40% Demonstrated A Longer Length Of Stay Than Those Whose Sleep Normalized Early. This Aligns With Existing Evidence Linking Poor Sleep With Delayed Healing, Impaired Immunity, And Prolonged Hospitalization⁴⁹.

Encouragingly, The Majority Of Patients (85 Out Of 150) Regained Normal Sleep Without Pharmacological Support, Usually Once Their Symptoms Were Controlled And They Adjusted To The Environment. However, A Subset Of Patients Required Short-Term Sedatives On Days 2 And 3 (N = 30), And 17 Patients Were Discharged With Sedatives To Aid Nighttime Sleep. This Emphasizes The Importance Of Both Non-Pharmacological Approaches And Careful, Limited Use Of Sedative Medications, Given The Well-Known Risks Associated With Benzodiazepines And Similar Agents⁶.

When Evaluating Interventions, Evidence Strongly Favors Multicomponent Sleep-Promotion Bundles Over Isolated Measures. These Bundles Typically Include Noise Reduction, Dimmed Lights, Sleep Kits (Eye Masks And Earplugs), Clustering Of Nursing Tasks, Symptom Optimization, And Clear Communication With The Patient. Several Trials Have Shown Such Bundles To Be Effective In Improving Sleep Quality And Patient Satisfaction⁷⁸¹⁰. Our Findings Reinforce The Feasibility And Clinical Importance Of Adapting These Practices In Indian Hospital Settings, Even With Resource Constraints.

Despite Growing Evidence, Significant Research Gaps Remain. There Is A Need For Larger, Multicenter Studies That Evaluate Long-Term Outcomes, Pharmacological–Nonpharmacological Combinations, And Sleep-Preservation Protocols Tailored To Indian Healthcare Environments. Additionally, Integrating Objective Sleep Monitoring Tools Such As Actigraphy Or Environmental Sensors (Noise/Lux Meters) Would Allow For More Precise Evaluation.

Overall, Our Findings Highlight That Hospital-Acquired Insomnia Is Both A Prevalent And A Modifiable Problem. Recognizing Sleep As A Core Component Of Inpatient Care—Akin To Monitoring Pain, Vitals, And Nutrition—Has The Potential To Improve Recovery Trajectories, Reduce Complications, And Enhance The Patient Experience.

Conclusion

Hospital-Acquired Insomnia Is A Widespread And Clinically Significant Issue Among Medical Inpatients, Particularly Those In Intensive Care. In This Study, Sleep Disruption Was Driven By Environmental, Clinical, Psychological, And Iatrogenic Factors, Many Of Which Are Preventable. Most Patients Regained Normal Sleep As Their Illness Stabilized And Environmental Triggers Were Minimized, But A Notable Proportion Required Short-Term Sedatives, And Some Developed Delirium-Like Symptoms Linked To Sleep Deprivation.

Evidence Supports A Structured, Bundle-Based Approach To Sleep Protection That Includes Improving The Nighttime Environment, Optimizing Workflow, Addressing Symptoms Proactively, And Using Medications Cautiously. Integrating Sleep Assessment And Sleep-Promoting Practices Into Routine Hospital Care Can Significantly Enhance Inpatient Recovery, Reduce Complications, And Promote Better Overall Outcomes.

Conflict Of Interest : The Authors Declare Having No Conflicts Of Interest For The Article.

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