

Need for Sleep Clinics in Psychiatric Practice

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Abstract

Sleep medicine is a rapidly developing specialty. Detection and treatment of sleep disorders is on the rise with changing lifestyles and more awareness. Sleep disturbances are increasingly commonly encountered in psychiatric practice compared with the general population. Sleep disturbances can be secondary to the psychiatric illness or might manifest as a side effect of psychotropic medications. However, they are frequently neglected or may be misdiagnosed as a primary psychiatric disorder and treated wrongly. Psychological disturbances such as depression can also occur due to primary sleep disorders. Comorbidity of sleep disorder and psychiatric disorder can affect treatment, course of both the disorders and ultimately affect the quality of life of the patients. Specialized sleep clinics are now a part of many specialties, such as pulmonary medicine. These clinics require specific standards with respect to staff and infrastructure; in addition, they necessitate effective liaison between multiple specialties. Development of sleep clinics in psychiatry would help in better detection, assessment, and treatment of sleep disturbances in psychiatric patients as well as those with primary sleep disturbances with secondary psychological distress. Sleep clinics would also help in understanding the complex relation between sleep and psychiatric disorders through research and would help in developing more effective management techniques.

Keywords: Sleep clinic, sleep disorder, psychiatric practice, psychotropic

Need for Sleep Clinics in Psychiatric Practice

A good laugh and a long sleep are the best cures in the doctor's book' — Irish proverb. The importance of adequate sound sleep is well known and not overrated despite our incomplete understanding of its functions. Systematic study of sleep disorders is fairly recent, as also the increasing awareness and

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detection of these disorders. Insomnia prevalence is 10–50% among patients undergoing primary care according to cross-sectional studies¹. Data regarding other sleep disorders is also emerging like shift work sleep disorder, affecting approximately 10% of night and rotating shift workers². Sleep disorders have important health consequences such as causing impaired attention and concentration, increased risk of accidents, and worsening of general medical conditions like hypertension and diabetes mellitus³. Inadequate sleep and sleep disorders have been associated with all-cause mortality⁴.

Sleep Disorders and Psychiatry

Sleep disorders are more common among the psychiatric population. The International Classification of Sleep

Disorders 2 (ICSD-2) specially mentions the presence of psychiatric illness as a cause of sleep disorder. In the International Classification of Diseases Manual 10th edition (ICD-10) Classification of Mental and Behavioural Disorders, sleep disorders are included under the category of 'Behavioural syndromes associated with physiological disturbances and physical factors'⁵ (Table 1). Psychiatric disorders and the psychotropic medications used to treat them are implicated in the causation of sleep disturbances. Similarly, sleep disorders can result in psychological disturbances such as impaired attention and concentration, fatigue, anxiety, depression, substance abuse and suicide. Improvement in either sleep or psychiatric disorder helps in the improvement of the above-mentioned disturbances. Hence, the relationship between sleep and psychiatric disorders appears to be bidirectional. However, primary sleep disorders are commonly undetected or misdiagnosed as psychiatric problems in general psychiatric practice. Common sleep disturbances seen in psychiatric practice are loss or excess of sleep, impaired quality of sleep, inappropriate timings of sleep, disturbed episodes related to sleep and concerns related to dreams. Sleep disturbances are commonly considered as symptoms of certain psychiatric disorders such as depression, and they are listed under diagnostic criteria for these disorders in ICD-10 as well as in Diagnostic and Statistical Manual of Mental Disorders 4th edition (DSM IV)^{5,6}. In depression, the sleep disturbances involved are early morning awakenings, increased REM density and insomnia or hypersomnia (which is a common feature of atypical depression)⁷. In mania, the patient generally has decreased sleep as a manifestation of illness, as well as a precipitating factor for the manic episode. Anxiety disorder patients complain of insomnia as well as poor quality of sleep; patients with post-traumatic stress disorder report of nightmares related to the stressful event. Sleep disturbances occur in 16–30% of patients with schizophrenia and are related to reduced quality of life and poor coping skills⁸. Common sleep changes in schizophrenia are difficulty in initiation or maintenance of sleep, decreased slow-wave sleep and reduced REM latency⁹. Sleep disturbances are found in 25–35% of subjects with Alzheimer's disease, with common disorders being long nocturnal awakenings, disrupted sleep and reduced total sleep time and sleep efficiency¹⁰. Similarly, sleep disturbances are reported in attention-deficit hyperactivity disorder (ADHD), substance abuse disorders and eating disorders¹¹ (Tables 2 and 3).

Table 1: Nonorganic Sleep Disorders in ICD-10

F51 Nonorganic sleep disorders	
F51.0	Nonorganic insomnia
F51.1	Nonorganic hypersomnia
F51.2	Nonorganic disorder of the sleep–wake schedule
F51.3	Sleepwalking (somnambulism)
F51.4	Sleep terrors (night terrors)
F51.5	Nightmares
F51.8	Other nonorganic sleep disorders
F51.9	Nonorganic sleep disorder, unspecified

Table 2: Psychiatric Disorders and Sleep Disturbances

Psychiatric Disorder	Sleep Disturbance Commonly Seen
Schizophrenia	Insomnia
Depression	Insomnia or hypersomnia
Mania	Insomnia
Anxiety disorders	Poor quality of sleep or insomnia
Post-traumatic stress disorder	Nightmares
Dementia	Insomnia, altered sleep–wake cycle, RBD
Delirium	Altered sleep–wake cycle, severe insomnia
Eating disorder	Insomnia, day-time sleepiness
ADHD, Autism	Insomnia

ADHD: attention-deficit hyperactivity disorder; REM: sleep behavior disorder

Table 3: Common Sleep Complaints in Psychiatric practice

Sleep Complaints in Psychiatric practice
Loss or excess of sleep
Impaired quality of sleep,
lack of 'refreshing' sleep
Inappropriate timings of sleep
Disturbed episodes related to sleep
Concerns related to dreams

Sleep disturbances, including those related to dreams, are common with the use of psychotropic medications. Benzodiazepines such as clonazepam are widely used for anxiety disorders and commonly cause daytime drowsiness as a side effect. Among antidepressants, tricyclic antidepressants (TCAs), trazodone and mirtazapine are known for their sedation effects, which is sometimes useful and sometimes disturbing. Among selective serotonin reuptake inhibitors (SSRIs), fluoxetine is associated with insomnia; sertraline is commonly

associated with sedation, whereas escitalopram is associated with either sedation or insomnia¹². Antidepressant drugs cause multiple effects on the architecture of sleep, of which suppression of REM sleep is the most important¹³. Antidepressants, as well as many other drugs, are also known to cause dream-related concerns, such as excessive dreams or might produce nightmares. Antipsychotics, especially clozapine and olanzapine, result in sedation, and they tend to increase the slow-wave sleep duration¹³. Of the mood stabilizers, lithium carbonate is more effective on sleep compared with carbamazepine or sodium valproate. In addition, amphetamine-like drugs used for ADHD can cause insomnia and nightmares as a side effect.

Studies have found that 15–20% of people diagnosed with insomnia suffer from major depression¹⁴. Sleep disturbances such as insomnia or hypersomnia are considered as risk factors for depression and anxiety disorders, and they are also the prodromal features for causing these psychiatric problems¹⁵. Additionally, nearly one-third of patients visiting sleep clinics have psychological problems, commonly mood disorders.

Sleep Disorders in Psychiatric Practice — Our Experience

National Institute of Mental Health and Neuro Sciences (NIMHANS) is a neuropsychiatric care centre in southern India. Every day, nearly 400 patients are evaluated and treated in the psychiatric outpatient department of the institute. Each patient is initially evaluated by a trainee and then assessed by a consultant psychiatrist before planning management. Diagnosis is made using ICD-10. We reviewed the available database for various sleep disorder diagnoses for cases evaluated in the past 5 years (2006–2011) and found that 59 patients assessed in the psychiatry department had received the diagnosis of sleep disorder (Table 4). These included 47 male and 12 female patients with a mean age of 44.13 years. Of them, 21 patients had comorbid psychiatric diagnosis (8 patients had anxiety disorder, 7 had mood disorder, 4 had substance abuse and 2 had other psychiatric disorders). Three patients had comorbid hypothyroidism. Management commonly consisted of the use of sedative hypnotics and use of psychological interventions such as sleep education, sleep hygiene and maintenance of a sleep diary. Appropriate referrals to other specialties were carried out where required. This data suggests that the number of patients diagnosed with

Table 4: Sleep Disorders in Our Practice

Diagnosis	Number of patients
Nonorganic insomnia	19
Nonorganic hypersomnia	3
Somnambulism	6
Night terror	4
Nightmares	4
Nonorganic disorder of sleep–wake schedule	1
Other nonorganic sleep disorders	3
Nonorganic sleep disorder unspecified	16
Narcolepsy	3
Organic sleep disorder	1

sleep disorder is low compared with the prevalence rates provided by different studies. This may be due to inability to identify the diagnosis due to more prominent comorbid psychiatric disorder or due to decreased awareness.

Sleep Clinics

Sleep clinics or sleep centres are specialized establishments focusing on the evaluation, investigation and management of sleep disorders. Sleep clinics are associated with sleep laboratories, which perform investigations such as polysomnography. Sleep clinics are generally associated with specialties such as neurology, pulmonary medicine, paediatrics and otorhinolaryngology because many of the patients suffering from sleep disturbances have comorbid or underlying conditions related to the above-mentioned specialties. For example, obstructive sleep apnea is a sleep disorder associated occurring secondary to ENT disorders, whereas chronic obstructive pulmonary disease (COPD), a pulmonary condition, is also associated with significant sleep disturbances.

Need for Sleep Clinics in Psychiatry

As discussed previously, psychiatric disorders have a common comorbidity of sleep disturbance, which may be due to illness-related or treatment-related factors. Primary sleep disorders are commonly misdiagnosed as psychiatric disorders and they are commonly associated with psychological distress. Hence, setting up of sleep clinics in psychiatric practice would help in increasing the diagnosis of sleep problems and in their effective

management. This will also help in furthering the research in this interface area and help in understanding the disorders better.

Challenges in setting up of sleep clinics are as follows:

- Scarcity of trained professionals and staff
- Multidisciplinary approach
- Need for association with sleep laboratory
- Need for patients to visit multiple clinicians
- Lack of awareness
- Possibility of conflicts in treatment strategies

American Academy of Sleep Medicine Accreditation Requirements for Sleep Centres

American Academy of Sleep Medicine (AASM) requires compliance in the following fields by the centres for accreditation and has given detailed accreditation standards (updated August 2011)¹⁶:

- Personnel, including licensing
- Policies and procedures
- Data acquisition, scoring and reporting
- Patient evaluation and care
- Quality assurance and more

Sleep Clinics in Psychiatry: Basic Requirements

Basic requirements of a sleep clinic are adequate office space, trained staff and inclusion of a sleep laboratory along with the facility to consult with specialists in other medical disciplines.

Sleep Clinics in Psychiatry: Evaluation and Management

Evaluation of patients presenting to the sleep clinic should consist of a detailed history regarding sleep as well as psychiatric disturbances, mental status examination, maintenance of a sleep diary, application of instruments for analysis of sleep and psychiatric disorders such as Epworth Sleepiness Scale, Pittsburgh Sleep Quality Index (PSQI) and Beck's Depression Inventory. It should also include relevant investigations and referral to a sleep laboratory as necessary. Management requires to be

tailored according to the needs of individual patients and should consist of pharmacological as well as non-pharmacological modalities, such as cognitive behaviour therapy. Sleep disorders commonly involve the use of non-pharmacological treatment modalities like stimulus control therapy, sleep hygiene and sleep restriction therapy. Offering these interventions may be more effective and focused if carried out in specialized clinics, in contrast to usual psychiatric outpatient departments; in addition, group therapy can be considered wherever feasible (Table 5).

Table 5: Disorders that Can Be Treated in Sleep Clinic in Psychiatric Practice

Insomnias Secondary to psychiatric disorders like depression, mania, substance-use disorders, ADHD, and so on Psychophysiological Adjustment insomnia Secondary to poor sleep hygiene Other causes
Hypersomnias Due to psychiatric disorder or psychotropics Behaviourally induced insufficient sleep syndrome Narcolepsy Kleine-Levin syndrome Idiopathic
Circadian rhythm sleep disorders
Parasomnias (undesirable physical and/or experiential phenomena accompanying sleep) REM sleep behaviour disorder Disorders of arousal — somnambulism, soliloquy Restless leg syndrome Bruxism Dream disturbances

Conclusion

Sleep clinics are welcome in psychiatric practice due to the high comorbidity of the disorders of sleep and mind. Comprehensive evaluation and management can be undertaken, which will help in better treatment and improved quality of life of the patients. Sleep clinics can also improve the detection of sleep disorders, which are sometimes undetected in routine psychiatric practice or considered as part of the illness. Research in this interface area would be promoted by the establishment of the sleep clinics, which would lead to better understanding and treatment. Challenges for the sleep clinics are in terms of resources, trained staff, multidisciplinary liaison and lack of awareness. Systemic and organized efforts will

be required in the future to overcome these challenges, and for this service to evolve.

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