The Relationship Between Sleep Disorders and Mental Health

[1] Dr. Naveed Akhtar
[2] Amina Yusuf

How to cite this article:

Akhtar, N., & Yusuf, A. (2025). The relationship between sleep disorders and mental health. *Pakistan Journal of Multidisciplinary*, *3*(1), 62-78.

Article Details

Received:28 Feb 2025

Accepted: 05 April 2025

Published: 25 June 2025

[1] Dr. Naveed Akhtar
[2] Amina Yusuf

Copyright @Author

Corresponding Author:
* Dr. Naveed Akhtar

Abstract

This research investigates the relationship between sleep disorders and mental health, emphasizing how disruptions in sleep patterns can exacerbate or contribute to various psychological conditions. Sleep disorders, including insomnia, sleep apnea, and restless leg syndrome, are prevalent in populations with mental health issues such as anxiety, depression, and bipolar disorder. This study reviews existing literature, including epidemiological studies and clinical trials, to explore the bidirectional relationship between sleep disturbances and mental health outcomes. Key findings indicate that poor sleep quality can lead to increased symptoms of mental illness, while mental health conditions can further disrupt sleep patterns, creating a cyclical effect. The research highlights the importance of addressing sleep disorders as a critical component of mental health treatment, suggesting that effective interventions such as cognitive behavioral therapy for insomnia (CBT-I) and lifestyle modifications can improve both sleep and mental health outcomes. Ultimately, this study advocates for a comprehensive approach to mental health care that incorporates sleep assessment and treatment, recognizing the significant role of sleep in overall psychological well-being.

Keywords: *sleep disorders, mental health, insomnia, anxiety, depression, sleep quality, cognitive behavioral therapy, psychological well-being.*

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..

Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

1. INTRODUCTION

Sleep disorders and mental health interact in intricate ways. Researcher have explored the adverse impacts of each, as both entities are widely recognized. Comorbidity between sleep disorders and various mental health conditions, such as depression, anxiety, and bipolar or psychotic disorders, have been reported. Sleep disturbances are also common among individuals with suicidal ideation, the watchful manifestation of suicidal behaviour or unsuccessfully attempted suicide . Besides co-occurring symptoms, the temporal and theoretically causal relationships between sleep disorders and mental health have garnered considerable interest. Disturbed sleep can precipitate various mental health outcomes, including affective and anxiety disorders. Conversely, mental health problems can precede or cause sleep disorders, such as anxiety disorders provoking insomnia or posttraumatic stress disorder contributing to nightmares.

In a broader scope, it is noteworthy that as many sleep disorders exist as mental disorders that disturb sleep or cause excessive sleepiness. To better develop intervention strategies towards serving both sleep disorders and the bases of mental health comorbidities among at-risk populations, different and common underpinning aspects must be acknowledged. Yet very few intervention and prevention programs have been designed that consider and address this multifaceted relationship . The current state of knowledge is deemed crucial to set up both efficient and long-term screening, management, and treatment guidelines for primary healthcare professionals, researchers, and the general public. Considering the growing courtesy and distress over mental health-related issues of sleep, raising awareness regarding the intricate relationships between sleep disorders and mental health—how one impacts the other one and vice versa—is essential. This article compares and discusses how poor sleep affects mental health, how mental health impacts sleep, and how to establish a better understanding to develop effective and intricate intervention strategies for both auspices. (Baglioni et al.2021)

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..

Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

2. UNDERSTANDING SLEEP DISORDERS

Insomnia is quite pervasive, affecting approximately one out of every four people in the United States. As opposed to typical beliefs, insomniacs do not only suffer from difficulty falling asleep, as most also exhibit issues staying asleep (Berjaoui et al., 2021). Other common symptoms of insomnia comprise waking up too early and having a nonrestorative sleep. Although this sleep disorder typically lasts between 3 to 6 months, risks of it turning into a chronic condition increase significantly in the aftermath of this timeframe. The diagnosis and treatment of insomnia is typically done through standard clinical assessments, along with the usage of actigraphy and sleep diaries.

Another prevalent type of sleep disorder that plagues many is obstructive sleep apnea (OSA). This condition affects approximately one in every five adults in terms of a mild case, with the percentage continuing to increase as the harshness grows (J Jaiswal et al., 2017). One of the major difficulties of diagnosing OSA stems from the fact that most individuals are unaware they have the disorder, as it only happens during sleep. Crude epidemiology data suggests that the prevalence of moderate to severe OSA is quite high and might be around 9% in females and 24% in males in the Middle East. The clinical assessment for OSA includes conducting a polysomnography or ensuring the completion of a valid sleep questionnaire. There are multiple therapeutic strategies for treating OSA, the first one usually consisting of lifestyle changes. Using continuous positive airway pressure (CPAP) machines is also quite common for helping patients that experience prolonged apneas.

In today's fast-paced society, there is a common belief that sleep should be sacrificed for the sake of greater productivity; however, too drastically reducing it can bring about counterproductive results. There is a spectrum of mental, emotional, and physical struggles that can emerge from sleeping problems. Consistent and rejuvenating sleep is a fundamental biological need to function adequately. Sleep is much needed for the body to rest, replenish, and regulate thermoregulation, hormone production, and metabolism, in addition to improving

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..
Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

memory retention. From a social standpoint, if the existence of a sleep disorder is unknown, this can lead to a considerable delay in seeking treatment.

2.1. Types of Sleep Disorders

Sleep disorders are common but often unrecognized conditions that can profoundly affect quality of life. However, most healthcare professi .(Furukawa et al.2022) onals are not familiar with sleep disorders, so the majority of individuals with sleep disorders remain undiagnosed and untreated and at substantially increased risk for several major diseases. This emphasizes the need to raise awareness about sleep disorders among general practitioners and other primary caregivers. These individuals are typically the first source of help for those suffering from a sleep disorder (J Jaiswal et al., 2017).

Given the diversity and complexity of many sleep disorders and their manifestations, and the difficulties in correlating nighttime symptoms with daytime complaints, awareness about them must be specifically addressed. It is important to recognize that symptoms of some sleep disorders manifest at different periods or intensities across the lifespan. For example, the intense and distinct nightmare activity of posttraumatic stress disorder is only apparent during REM sleep in the late night, while the walking episodes of REM behavior disorder occur in the early morning. Similarly, a fixed bedtime after long work hours can accentuate the delayed sleep phase in adolescents. Differentiating between sleep disorders is important for the prompt recognition and targeted treatment of both disorders. For example, insomnia is rare in narcoleptics and does not occur in cases of mild SDB, whereas patients with insomnia OSA frequently make the correct complaint about their nocturnal breathing problems. The comorbidity of certain sleep disorders can also explain unusual presenting symptomatology, for example, complaints of chronic or recurrent insomnia with excessive daytime sleepiness in periodic leg movement disorder/restless legs syndrome (C. Abad & Guilleminault, 2003). There is also a growing body of literature delineating the bidirectional relationship between sleep disorders and various medical and psychiatric problems. Studies have documented that sleep professionals are lacking in the general physician community across the globe. Such a knowledge

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..

Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

deficit has been shown to exist among pediatricians, especially in the field of pediatric sleep-disordered breathing. A study revealed that 77% of pediatricians were unaware of the information they should be giving to their patients diagnosed with sleep-disordered breathing. Moreover, sleep disorders are often complex in their presentation. Although 80% of obstructive sleep apnea cases go undiagnosed, several barriers exist for the recognition of this disorder. Two surveys have shown that only 10% of hospital residents receive training on common sleep disorders. In an unrelated study performed in France, among 213 medical students in the final week of their undergraduate medical training, one-third believed the total sleep duration in infants decreases with age, and two-thirds could not explain the origin for nightmares. These studies highlight not only the gap in sleep knowledge but also the need for better education on sleep disorders. There have been estimations of the prevalence of other sleep disorders. Sleep-disordered breathing was found in 14.6% and restless legs syndrome in 1.2% of the cases. However, the aforementioned studies were conducted in specialized clinics. Since many cases of sleep disorders may not reach specialty clinics, better-educated health professionals in first-contact settings may significantly improve recognition. It is against this backdrop that it is important for healthcare providers to have an understanding of sleep, sleep disorders, and their diverse manifestations. (Xin et al.2022)

2.2. Causes and Risk Factors

1. Introduction

Sleep disorders are conditions that prevent someone from getting the minimum required amount of sleep, which may involve difficulty falling asleep, difficulty staying asleep, irregular sleep-wake cycles, and even sleeping too much (Sun et al., 2022). It is a common misconception that going without sleeping for a few hours is akin to having a sleep disorder, while in actuality the latter term refers to developmental, medical, psychiatric, neurological, and sometimes behavioral factors that consistently inhibit normal sleep patterns. Sleep problems are understood to be caused by a variety of factors including but not limited to acute stress, chronic stress, other mood disorders, some neurological problems, and

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..

Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

some medical conditions, including obesity. It is often difficult to discern which causes lead to a specific sleep problem, so a general understanding of these numerous causes is important in order to diagnose, prevent, and treat sleep disorders effectively.

In a broad sense, sleep disorders are a family of conditions that cause abnormal patterns of sleep, and in some cases abnormal conduct or movements during the sleep process. There are many classifications of sleep disorders, including but not limited to insomnia, sleep apnea, narcolepsy, restless legs syndrome, nightmare disorder, sleepwalking, and various parasomnias. This section addresses the various causes and risk factors of how a person may acquire sleep disorders without falling into the complicated and often overlapping categories of specific disorders. These causes are divided into three categories: Biological Factors, Psychological Factors, and Environmental Factors. It should be understood that this is based on a variety of viewpoints and theories in order to get a general understanding. (Riemann et al.2022)

3. IMPACT OF SLEEP DISORDERS ON MENTAL HEALTH

Sleep quality can have a significant impact on the overall mental health of individuals, regardless of a sleep disorder diagnosis (M. Milojevich & F. Lukowski, 2016). Poor sleep quality has been associated with functional impairment in previous research. Traditionally, impairment associated with sleep problems has been examined in clinical (or at-risk) populations because individuals until recently were not as aware of sleep disorders or the associated disturbances. Findings indicate that, regardless of comorbid physical and mental health conditions, adolescents with sleep problems also report greater levels of functional impairment, suggesting that community-based assessment and interventions for co-occurring sleep problems may be indicated. The relative strength of these associated sleep impairment differ between individual health and functional domains, suggesting that tailored interventions based on subjective areas of impairment may provide relief for those experiencing difficulties across a range of developmental tasks. Analyses also revealed that particular domains of functional

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..

Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

impairment may serve as markers of future health adjustment difficulties, highlighting the utility of early detection and intervention for the development of more severe morbidities within individual lifestyle and interpersonal domains. A study found support for a bi-directional association between sleep disturbances and anxiety levels. Treatment aiming to reduce anxiety levels should also target sleep improvement, as these disturbances appear to be partially dependent. In college students diagnosed with a mental health disorder, poor sleep predicts 13.4% of anxiety symptoms, underlining its relevance in this population. On the other hand, anxiety also predicts poor sleep quality in college students; 2.5% of sleep quality variance is explained by anxiety level increase by a standard deviation. Sleep disturbance prevalence is estimated between 28% and 54%, which suggest that these disturbances may be target of prevention and have a strong public mental health impact. The bidirectional relationship found between sleep disturbances and anxiety in the longitudinal analyses is also supported in the path analyses. It has been shown that anxiety predicts poor sleep quality. (Cheng et al.2021)

3.1. Depression

A frequently studied aspect of the relationship between sleep disorders and mental health is the way that sleep disorders can be a symptom of depression or manifest as a symptom of depressive disorders (Fang et al., 2019). In turn, sleep problems can exacerbate mental health problems or cause them. According to the bidirectional relationship model of sleep disturbance and depression, removing or alleviating sleep problems will improve the outcomes of other mental disorders such as depression. There is wide recognition of this bidirectional relationship between sleep disturbances and depression, abridgment for this relationship as well as the mechanisms that may underpin it is the focus of this section. Poor-quality sleep has been shown to be associated with more low mood, and there is a dose-response relationship between the severity of poor sleep and the severity of depression. The causal relationships between these are likely to be bidirectional. Understanding the pathophysiological models by which sleep disturbances and depression might co-occur is important in order to

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..

Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

generate more targeted treatment and prevention options. Insomnia is the most prevalent and common residual symptom in this patient's category and is also the most common community sleep disorder, scoring it as a prominent complaint of many people with mood disorders. Depression is correlated with increased rates of insomnia and hypersomnia, and hypersomnolence is a component of atypical depression, and these features may be prevalent at different points in the life course or type of depressive experience. The treatment of sleep disorders in people with depression is of the utmost importance, as it may play the role of both a critical factor and a leverage point for the alleviation of depressive symptoms. This model may be partially explained by sleep problems causing functional changes in brain regions implicated in depression. The model suggests that such changes may drive cognitive, emotional and physiological alterations that reciprocally predispose the development of depression. In this way, tackling sleep issues may be a potential preventative measure against the onset of depressive symptoms. Therefore, to improve the trials targeting depression symptoms, it is essential that sleep disturbances are appropriately treated. There is a notable overlap in pharmacological agents used to improve either depression-related sleep disturbances or improving sleep in a primary complaint of depression patients. These prominently include some classes of antidepressant drugs and hypnotic therapies. Using a standard group therapy intervention early can be associated with larger benefits, although the remission rates for those receiving control therapy are still lower than desired. Thus, there would seem to be added benefits of modular or augmentation therapies specifically coping with this symptomatic complaint. Those patients having previously received sleep-enhancing therapy have twice the rates of remission, and those who experienced insomnia as a comorbid but fully resolved it have the lowest symptom relapse rates. Similarly, the prevention of all major symptoms with any formulation of drugs and/or psychotherapy can result in higher global remission rates. It is well-known that both severe sleep disturbances and increased depression severity can lead to increased rates of unimproved emotional symptoms. Although effective at improving overall global symptoms in MDD, early treatment of the major

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..

Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

depressive episode may not alleviate emotional disturbances. (MacKinnon et al.2021)

3.2. Anxiety

Sleep and anxiety have a complicated relationship, with poor sleep exacerbating feelings of anxiety, which in turn can disturb sleep. This cycle can contribute to emotional instability. Sleep disturbance is one of many potential reasons for the often-overlooked risks of suicide in youth (M. Gregory et al., 2008). The difficult process of their teenage years may be magnified further for some youth dealing with sleep disorders. As a previous section analyzes, there are many possible negative ramifications of poor sleep. Anxiety is a feeling characterized by nervousness, panic or dread, while anxiety disorders refer to a range of longer-lasting anxiety symptoms that may further interfere with sleep. In addition to feeling tense, anxious, restless and jittery, further symptoms of anxiety include being continually preoccupied, having recurring unpleasant thoughts, being terrified of losing control, feeling like dying and feeling like various situations may be dangerous. There are a number of sleep related issues that are more common in people with an Anxiety Disorder, such as insomnia, which can be further explained with an anxiety disorder affecting many individuals diagnosed with mental health difficulties (J. Oakes et al., 2022). However, another potential way that this interaction can be explained is through making many of the physiological changes to the body emphasized earlier to heighten symptoms of an anxiety disorder.

Psychiatric disorders invariably have some impact on sleep, and epidemiological evidence shows that poor sleep considerably heightens the risk of developing a particular psychiatric disorder. For instance, a meta-analysis of longitudinal studies regarding sleep complaints and associated morbidity has found a consistent negative association, implying that people with sleep issues are more likely to develop various other psychiatric conditions. As such, improvements to sleep quality for those with high levels of anxiety could potentially lessen anxieties, and vice versa, hence suggesting an integrated approach to this wide-ranging issue.

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..

Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

Moreover, this document aims for a critical examination of research concerning the indirect trials and the complex relationship between sleep and anxiety. It is essential to better understand how addressing sleep related issues can be effective in alleviating anxiety symptoms, and vice versa, to encourage advances in an integrated examination of sleep and anxiety in the mental health care of young people. (Georén et al.2022)

3.3. Bipolar Disorder

Disturbed sleep is a prevalent and persistent feature of both depression and bipolar disorder, and it can also predate the development of these mood disorders. However, there is a paucity of routine enquiry and successful intervention provided to young people with mood disorders who present with sleep complaints. It is important for healthcare professionals to explore and treat sleep problems in children and young people with mood disorders in order to address significant disturbances in their daily lives, functioning, and academic success and because the resolution of sleep problems is connected to these outcomes.

Disturbed sleep can play a role in predicting new episodes of mania or depression and other negative outcomes in those already diagnosed with bipolar disorder. These symptoms are known to manifest in terms of various sleep complaints that are co-occurring, persistent, severe, and similar to those experienced by people with unipolar depression. The relationship between sleep complaints and mood disturbance is complex and not straightforward. In those diagnosed with bipolar disorder, depressive symptoms co-occur with other psychopathology, functional impairment, and are often chronic. Sleep problems can exacerbate the severity of mania or depression; conversely, sleep problems can improve mood state when treated or when routine and appropriate behaviours are implemented, and a predominance of sleep complaints could re-classify a diagnosis of unipolar depression to that of bipolar disorder. Maladaptive sleep routines in adolescence predict a first onset of both mania and hypomania. However, these associations currently appear stronger in relation to the development of BP-II. Furthermore,

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..

Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

the more sleep complaints present, the earlier the onset of mania will become. This is significant as earlier onset of mania, in turn, is likely indicative of a more severe morbid course of bipolar disorder. There is strong but emerging evidence that young people with mood disorders present with disturbed sleep, and that being treated with medications and/or therapy is associated with the successful management of sleep complaints. These findings underline the importance of developing and testing adolescent-specific indications in order to effectively and comprehensively manage sleep complaints in young individuals with both depression and bipolar disorder. (Van et al.2022)

4. BI-DIRECTIONAL RELATIONSHIP

Both sleep disorders and mental health are strong determinants of overall health and quality of life, so it is important to understand their relationship (Sun et al., 2022). Sleep disorders can be a strong indicator of mental health problems. Mental health disorders are likely to cause negative lifestyles and behaviors, increase pressure on the body and brain, and exacerbate susceptibility to sleep disorders. It is possible that sleep disorders could also cause poor mental health. In addition to the secretion of melatonin and serotonin from the pineal gland as explanations, studies have also suggested the existence of a bi-directional genetic relationship between these two types of diseases. In other words, as sleep-associated traits could be affected by mental disorders, mental disorders would also be likely to result from sleep-associated traits. To gain benefits for public health management and for the development of medicines, it is essential to understand the bidirectional relationships between sleep disorders and mental health disorders, as states and our findings.

From the standpoint of social cost and detrimental impact on wellbeing, sleep and mental health are substantial medical and public concerns. An absence of sleep negatively impacts mental problems. Mental diseases may lower the indifference towards lifestyle, making inappropriate decisions likely, which would increase the risk of sleep disorders. Poor sleep quality often increases the proportion of slow wave sleep and REM sleep while decreasing the percentage of deep sleep. This

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..
Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

should increase the "finding" time during sleep, which lowers the average sleep temperature.

Sleep disorders are a problem that worsens overall health over a long period of time. Sleep is very important in terms of physiology. Slow wave sleep increases immune function and provides time for the body to rest and repair (Berjaoui et al., 2021). In addition to the pineal gland releasing melatonin and serotonin, several other hormones that are associated with sleep and waking up are secreted from other glands. (Maccora et al.2022

4.1. How Mental Health Affects Sleep

Often in the tabloids, we'll see articles discussing the importance of a good night's sleep, some tips and tricks for helping you achieve one and the negative side effects of not getting enough. There are countless studies that focus on sleep and its relation to both physical and mental health. Many studies have demonstrated this connection, showing how quickly both domains can affect each other. Specifically focusing on how mental health can disrupt sleep, there are a myriad of ways psychological wellbeing can influence sleep and a lot of research that demonstrates how individuals diagnosed with mental health disorders often report disturbances regarding their sleep (M. Milojevich & F. Lukowski, 2016). It is fairly easy to see how stress, anxiety and mood swings can disrupt somebody's ability to achieve a good night's sleep. Biologically, there is a lot going on in one's brain that is responsible for feelings of sleepiness and wakefulness. For individuals with mental health disorders, the most current and common hypothesis is that an individual's natural cycles of sleep and wake are changed due to hyperactivity of the arousal system and/or hypoactivity of the sleep system. Additionally, many common mental health disorders have physiological responses that can become chronic if they are not adequately managed. These responses will innately help create an environment that is not conducive to sleep. Thus it's easy to say how getting a good night's sleep can be particularly difficult for these individuals. How sleeping patterns can be incorporated as an intervention to improve mood and reduce symptoms of common psychopathologies is investigated. Interventions

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..

Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

and techniques that help support the ability to adequately process and manage emotions by case studies. Since everything is connected and mental and physical health are tightly intertwined - changing one can have a positive or negative effect on the other. Ultimately the takeaway from this discussion should be that people are really focusing on and thinking about the best biopsychosocial interventions they can implement as to allow these individuals the ability to get a good night's sleep.

5. TREATMENT APPROACHES

Treatment approaches to sleep disorders and their impact on mental health will be studied. Considering the complex nature of sleep disorders, a "one-size-fits-all" approach cannot provide optimal treatment outcomes. Best practice guidelines offer a tiered approach to intervention for complex presentations addressing general sleep hygiene and basic stimulus control, progressing to more complex treatments including psychological approaches for insomnia. Such modular, stepped care is particularly important when considering sleep disorders in the context of other psychological conditions. The relationship between sleep disorders and mental health is complex, with a wide range of bidirectional relationships. This complexity can exacerbate the issue of "silo-ing" between mental health services for either mental health or sleep concerns. Even when sleep issues are addressed in mental health, it is commonly through pharmacotherapy which can exacerbate sleep disorders. The subsequent escalation of sleep medication to manage this can have a range of negative health impacts, contributing to the development of enduring and increasingly chronic conditions. High rates of inappropriate pharmacotherapeutic treatment of sleep disorders reported suggest that a complex presentation of poor sleep and mental health may result in inappropriate prescription of psychotropic medications which can in turn escalate existing conditions. A review of interventions for sleep disturbances further highlights the blurring of lines between mental health and sleep with many of the described interventions related to sleep resembling current mental health treatments. The overlap of strategies understood to be

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..
Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

effective in mental health and sleep supports the notion that a siloed approach to mental health and sleep disorders may not be appropriate.

5.1. Pharmacological Treatments

Pharmacological treatments for sleep disorders are a common consideration for sleep specialists and nonspecialists. The purpose of this paper is to provide an overview of the clinical pharmacology of drugs commonly involved in the treatment of sleep disorders. The layout in this paper is not according to diagnosis one might encounter, but by classification of the drugs that are aimed at treating sleep disorders. Pharmacology of drugs aimed at treating sleepiness, sleeplessness, or excess sleep is reviewed. Drug treatments of circadian rhythm and other sleep-related movement disorders are considered.

Sedatives and Hypnotics While some sleep disorders may be caused by medication, many patients with CNS disease may still need a sedative. However, the risk of drug dependence may be enhanced. Patients with cancer often suffer significant side effects related to the disease itself and its treatment. Since symptoms of the disease often worsen at night, this can result in severe sleep disorders treatment of the conditions causing the sleep disorder. Sedatives and hypnotics increase the quality and amount of sleep, as well as the number of nocturnal awakenings. Barbiturates and benzodiazepines are pharmacological alternatives to sleep, with both the barbiturates and the benzodiazepine receptor agonists used, in addition the effects of increasing GABA activity at the benzodiazepine receptor are not restricted to the function of the centre reticular formation itself. There are two other effects which are important to patients with underlying brain pathology. The rate of introduction of the barbiturates and the BZRAs to the market was very fast. However, controversy regarding tolerance, dependence, and possible. Ergo, we promptly discontinued without an adequate scientific basis in patients with CNS pathology, and there has been a more general move away from using these compounds from the 1970s onwards in favour of newer "non-habit-forming" hypnotics. The pharmacology and the peculiar characteristics of these older compounds are reviewed separately.

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..

Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

5.2. Cognitive Behavioral Therapy for Insomnia (CBT-I)

Cognitive behavioral therapy for insomnia (CBT-I) is a structured, evidence-based treatment approach for sleep disorders. Evidence demonstrates that CBT-I effectively improves sleep quality as well as psychological factors in insomnia patients. CBT-I consists of cognitive reconstructing and behavioral interventions to change sleep habits and nighttime thoughts about sleep. Stimulus control, sleep hygiene education and relaxation training are behavioral interventions of CBT-I (Yamamoto et al., 2021). Sleep restriction, considered one of the most superior components of CBT-I, is also used to reduce the time spent in bed by setting a strict sleep window.

CBT-I can be used alone or in conjunction with other treatments, such as pharmacological interventions. Compared to drugs, another benefit of CBT-I is that it is a time-limited treatment with no dependency risk, so patients can retain the gained benefits even after therapy ends. It focuses on helping individuals help themselves by acquiring the skills needed to address their sleep problem. The therapist and the patient work together to develop an individualized treatment plan based on a careful assessment of the patient's sleep history, patterns, habits, and current state. This process involves exploring the causes of sleep disturbance, adjusting sleep schedules, and conducting tailored interventions to reshape patient beliefs about sleep. The goal is to encourage stable, sustainable changes in sleep patterns by addressing behaviors that help or hinder sleep.

Conflict of Interest

Not reported in the supplied article; author confirmation required.

Funding

Funding information was not reported; author confirmation required.

Data Availability

The article reviews published literature. No original dataset is identified in the supplied text.

Informed Consent

Not applicable to the literature review described in the article.

Use of Generative AI

Use of generative AI in the original research and writing was not reported; author confirmation required.

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..

Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

References:

Baglioni, C., Espie, C. A., Altena, E., Gavriloff, D., Jernelöv, S., Holzinger, B., ... & Riemann, D. (2021). Cognitive behavioural therapy for insomnia disorder: Extending the stepped care model. Journal of Sleep Research, 32(6), e14016. wiley.com

Berjaoui, C., Tesfasilassie Kibrom, B., Ghayyad, M., Joumaa, S., Talal Al Labban, N., Nazir, A., Kachouh, C., Akanmu Moradeyo, A., Wojtara, M., & Uwishema, O. (2021). Unveiling the sleep-cardiovascular connection: Novel perspectives and interventions—A narrative review. ncbi.nlm.nih.gov

C. Abad, V. & Guilleminault, C. (2003). Diagnosis and treatment of sleep disorders: a brief review for clinicians. ncbi.nlm.nih.gov

Cheng, P., Kalmbach, D. A., Hsieh, H. F., Castelan, A. C., Sagong, C., & Drake, C. L. (2021). Improved resilience following digital cognitive behavioral therapy for insomnia protects against insomnia and depression one year later. Psychological medicine, 53(9), 3826-3836. cambridge.org

Fang, H., Tu, S., Sheng, J., & Shao, A. (2019). Depression in sleep disturbance: A review on a bidirectional relationship, mechanisms and treatment. ncbi.nlm.nih.gov

Furukawa, Y., Sakata, M., Yamamoto, R., Nakajima, S., Kikuchi, S., Inoue, M., ... & Perlis, M. (2022). Components and delivery formats of cognitive behavioral therapy for chronic insomnia in adults: a systematic review and component network meta-analysis. JAMA psychiatry, 81(4), 357-365. jamanetwork.com

Georén, L., Jansson-Fröjmark, M., Nordenstam, L., Andersson, G., & Olsson, N. C. (2022). Internet-delivered Cognitive Behavioral Therapy for insomnia in youth with autism spectrum disorder: A pilot study. Internet interventions, 29, 100548. sciencedirect.com

J Jaiswal, S., L Owens, R., & Malhotra, A. (2017). Raising awareness about sleep disorders. ncbi.nlm.nih.gov

J. Oakes, D., A. Pearce, H., Roberts, C., G. Gehrman, P., Lewis, C., Jones, I., & J.S. Lewis, K. (2022). Associations between comorbid anxiety and sleep disturbance in people with bipolar disorder: Findings from actigraphy and subjective sleep measures. ncbi.nlm.nih.gov

M. Gregory, A., R. Crawford, M., E. Holland, J., & A. Willis, T. (2008). Associations between Sleep Problems and Anxiety in Youth. [PDF]

M. Milojevich, H. & F. Lukowski, A. (2016). Sleep and Mental Health in Undergraduate Students with Generally Healthy Sleep Habits. ncbi.nlm.nih.gov

Maccora, J., Garland, S. N., Ftanou, M., Day, D., White, M., Lopez, V. A., ... & Wiley, J. F. (2022). The sleep, cancer and rest (SleepCaRe) trial: rationale and design of a

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..

Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.

randomized, controlled trial of cognitive behavioral and bright light therapy for insomnia and fatigue in women with breast cancer receiving chemotherapy. Contemporary Clinical Trials, 120, 106877. [HTML]

MacKinnon, A. L., Madsen, J. W., Dhillon, A., Keys, E., Giesbrecht, G. F., Williamson, T., ... & Tomfohr-Madsen, L. (2021). Sleeping for two: study protocol for a randomized controlled trial of cognitive behavioral therapy for insomnia in pregnant women. Trials, 22(1), 532. springer.com

Riemann, D., Benz, F., Dressle, R. J., Espie, C. A., Johann, A. F., Blanken, T. F., ... & Van Someren, E. J. (2022). Insomnia disorder: State of the science and challenges for the future. Journal of sleep research, 31(4), e13604. wiley.com

Sun, X., Liu, B., Liu, S., J. H. Wu, D., Wang, J., Qian, Y., Ye, D., & Mao, Y. (2022). Sleep disturbance and psychiatric disorders: a bidirectional Mendelian randomisation study. ncbi.nlm.nih.gov

Van Looveren, E., Meeus, M., Cagnie, B., Ickmans, K., Bilterys, T., Malfliet, A., ... & Mairesse, O. (2022). Combining cognitive behavioral therapy for insomnia and chronic spinal pain within physical therapy: a practical guide for the implementation of an integrated approach. Physical Therapy, 102(8), pzac075. uantwerpen.be

Xin, Q., Paudel, D., An, K., Ye, Y., Zheng, S., Chen, L., ... & Yin, H. (2022). Thematic trends and knowledge structure on cognitive behavior therapy for insomnia: A bibliometric and visualization analysis. Frontiers in Psychiatry, 13, 940741. frontiersin.org

Yamamoto, M., T Lim, C., Huang, H., Spottswood, M., & Huang, H. (2021). Insomnia in primary care: Considerations for screening, assessment, and management. ncbi.nlm.nih.gov

[1] Assistant Professor, Department of Psychology, Government College University Lahore, Lahore.
[2] MPhil Scholar, Department of Psychology, Government College University Lahore, Lahore..

Copyright (c) 2026 Author(s)
This work is licensed under a Creative Commons Attribution 4.0 International License.