Foundations of Psychiatric Sleep Medicine
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Edited by

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Sleep complaints are extraordinarily common among patients with psychiatric illness. Determining all the contributing causes of a sleep disturbance so that appropriate management can be implemented is a significant clinical challenge. Unfortunately, the majority of practicing clinicians are not given adequate training regarding sleep and its disorders, and thus optimal diagnosis and treatment are too often delayed or ignored.

*Foundations of Psychiatric Sleep Medicine (FPSM)* is a clinically accessible and academically rigorous primer designed to bridge the gap between the burgeoning field of sleep medicine and those who care for patients with psychiatric illness. Composed of 24 chapters divided into 7 sections, FPSM is a comprehensive resource with contributions from leaders in both fields detailing diagnostic and management issues at the nexus of sleep medicine and psychiatry. The first section discusses the history of the two fields, demonstrating the mutual influences and parallel development of the disciplines. The second section builds a foundation for the reader by detailing molecular and physiological mechanisms underlying sleep and wakefulness, methods used to characterize and stage sleep, as well as theoretical discussions of dreams and the functions of sleep. The third section outlines sleep history-taking, with particular emphasis on the psychiatric patient. The fourth section details primary sleep disorders including sleep disordered breathing, sleep-related movement disorders, narcolepsy, parasomnias, and circadian rhythm disorders, with a particular focus on how these illnesses may present in psychiatric contexts. The fifth section focuses on insomnia, the most common sleep complaint in psychiatric practice, with separate chapters focusing on epidemiology and the role of insomnia in psychiatric illness, as well as pharmacological and psychotherapeutic treatments. The sixth section details the nature of sleep disturbance across the psychiatric disease spectrum including mood, anxiety, psychotic, substance use, and cognitive disorders. Also included are chapters devoted to disorders primarily occurring in children such as attention-deficit/hyperactivity disorder, pediatric mood and anxiety disorders, and development disorders. The book concludes with a discussion of future directions at the interface of sleep medicine and psychiatry. FPSM is an invaluable resource for the practicing mental health clinician, and more broadly for any practitioner who manages patients with co-occurring sleep and psychiatric complaints.
It is clear to any clinician who cares for those with psychiatric illness that disturbed sleep is a significant problem and great source of distress for patients. Long regarded as an epiphenomenon of the mental illness itself, it has previously been assumed that treatment of an underlying psychiatric disorder would result in resolution of the sleep disturbance. This paradigm has been called into question in recent years by growing evidence that sleep disturbance itself may play a vital role in the presentation, management, and course of many psychiatric disorders.

Sleep and psychiatric illnesses are powerfully linked in numerous ways. This is likely because, at both the observable and neurobiological levels, what and how we think and behave influences our sleep, and conversely, how we sleep influences our thinking and behavior. The most prevalent sleep complaint, insomnia, is frequently co-morbid with mental illness and is linked to a host of neuropsychiatric symptoms. In fact, insomnia may be present across the entire history of psychiatric disorders: as a risk factor for the development of incident mood, anxiety, and substance use disorders, as well as a symptom of active illness, an iatrogenic response to psychotropic medications, and risk factor for symptomatic relapse in a number of psychiatric disorders.

The value to psychiatrists of understanding sleep medicine has become increasingly evident over the past 20 years. The neuropsychiatric sequelae of primary sleep disorders such as sleep-related breathing disorders, sleep-related movement disorders, and circadian rhythm sleep disorders are increasingly recognized. In addition, psychotropic medications prescribed to treat psychiatric illness may inadvertently induce or exacerbate primary sleep disorders such as REM behavior disorder, obstructive sleep apnea, and restless legs syndrome, leading to unsuccessful treatments, paradoxical responses, or unwanted/unintended side-effects. Furthermore, psychotropic medications prescribed for the management of sleep-related symptoms presumed to be inherent to psychiatric illness, such as stimulants used to treat hypersomnia in atypical depression, may mask a primary sleep disorder (e.g. obstructive sleep apnea or narcolepsy) that may be the true underlying cause of the sleep-related complaint.

Due to the interrelationship between sleep and psychiatric illness, and psychiatrists’ expertise in psychopharmacological and behavioral treatments, patients with sleep disturbance are often referred to mental health providers for evaluation and management. As a result, it has become increasingly important for the practicing mental health clinician to have a firm grasp of diagnostic and therapeutic techniques for patients with sleep complaints. To do so requires an understanding of the basic mechanisms of sleep and wakefulness, the pathophysiology of primary sleep disorders, the effects of psychiatric and psychological treatments on sleep, and the nature of sleep disturbance inherent to mental illness.

With the rise of sleep medicine as a specialty over the last half-century, our scientific understanding of sleep and its disorders has grown exponentially. The history and development of psychiatry and sleep medicine have been intimately intertwined, with psychiatrists and psychologists contributing significantly to this burgeoning field. Unfortunately, despite the contributions of these pioneering individuals, many of whom we are delighted to have as contributors to this book, there continues to be a chasm between sleep medicine and psychiatry. Few trainees (at any level of training or in any specialty) receive formal instruction on sleep and its disorders. Without such a knowledge base, patients with sleep-related complaints often do not receive optimal care because appropriate clinical questions are not asked, informed differential diagnoses are not developed, diagnostic tests are not pursued, and treatment plans are not thoughtfully composed.
Thus, the primary impetus for the development of Foundations of Psychiatric Sleep Medicine (FPSM) was to bridge the gap between sleep medicine and psychiatry, and to translate the findings from sleep and neuroscience into the clinical practice of caring for patients with psychiatric illness. As such, our goal was to develop FPSM to serve as a clinically useful, but academically rigorous, primer on sleep medicine for those who treat patients with mental illness. In addition, FPSM is a highly useful resource for sleep medicine clinicians with non-psychiatric backgrounds, who have not had formal training in managing patients with mental illness, as sleep medicine specialists are often asked to serve as consultants for patients with psychiatric disorders. Thus, this text is not an attempt to emphasize divisions within sleep medicine, but rather to highlight advances in sleep science and disorders to those in psychiatric professions. Furthermore, we hope it will simultaneously foster understanding within the interdisciplinary community of sleep medicine regarding the management of sleep disturbance in psychiatric populations.

The overall design of FPSM is straightforward and is comprised of seven sections. The first section reviews the history of sleep medicine and psychiatry, emphasizing the inter-related developments of both fields over the last century. The second section (Chapters 2–5) focuses on normal sleep, from molecular mechanisms of the circadian clock to the neurophysiology of sleep, including sleep staging and neuroimaging research. Other chapters discuss the theoretical functions of sleep and our current scientific understanding of dreams. The third section details clinical sleep history-taking, with a particular emphasis on psychiatric patients. Included are signs and symptoms that suggest referral for diagnostic studies and/or consultation with a sleep medicine specialist may be indicated. Section 4 of the book (Chapters 7–11) discusses primary sleep disorders including sleep disordered breathing, sleep-related movement disorders, narcolepsy, parasomnias, and circadian rhythm disturbances, with a particular focus on how these illnesses may present in psychiatric settings. This is particularly relevant to the practicing mental health clinician as many primary sleep disorders may present with neuropsychiatric symptoms, and several psychotropic medications can induce or exacerbate primary sleep disorders. Section 5 focuses specifically on insomnia, the most common sleep complaint in psychiatric practice. The principles of insomnia in psychiatric contexts, including the epidemiology and role of insomnia in the risk for development of and relapse to psychiatric illness are discussed. Additionally, separate chapters address pharmacological and psychotherapeutic treatments of insomnia. Section 6 (Chapters 15–23) details the nature of sleep disturbance in psychiatric illnesses across all major classes of psychiatric disorders including: mood, anxiety, psychotic, cognitive, and addictive disorders. Additionally, chapters devoted to disorders primarily occurring in childhood, including attention-deficit/hyperactivity disorder, pediatric mood and anxiety disorders, and developmental disorders, are provided. The book concludes with a discussion of the future directions of discovery and treatment at the nexus of sleep medicine and psychiatry.

We would like to take this opportunity to thank the authors who have so graciously contributed to this work, without whom such an endeavor would not have been possible. We also thank our families, whose patience and support have been invaluable throughout the process of developing this textbook. Finally we thank our teachers and mentors who have provided, and continue to provide, support for our growth and development. We hope that our efforts on this volume reflect their generosity and may spur the interest of future trainees to pursue clinical work and research at the interface of sleep medicine and psychiatry, in the hope of advancing both fields.

This material is based upon work supported by the American Sleep Medicine Foundation. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the author(s), and do not necessarily reflect the views of the American Sleep Medicine Foundation.