CAMBRIDGE

Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

Sleep and Mental Illness

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

Sleep and Mental Illness

Edited by
S. R. Pandi-Perumal
Somnogen Inc.
Milton Kramer
University of Illinois, Chicago

CAMBRIDGE
UNIVERSITY PRESS

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE

Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

103 Penang Road, #05–06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org
Information on this title: www.cambridge.org/9780521110501

© Cambridge University Press & Assessment 2010

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press & Assessment.

First published 2010

A catalogue record for this publication is available from the British Library

Library of Congress Cataloging-in-Publication data
Sleep and mental illness / edited by S. R. Pandi-Perumal, Milton Kramer.
p. cm.
Includes bibliographical references and index.
ISBN 978-0-521-11050-1 (hardback)
1. Sleep disorders. 2. Mental illness–Complications. I. Pandi-Perumal, S. R. II. Kramer, Milton, 1929–
[DNLM: 1. Mental Disorders–complications. 2. Sleep Disorders–complications. WM 140 S632 2010]
RC547.S5177 2010
616.8´498–dc22
2009050376

ISBN 978-0-521-11050-1 Hardback

Cambridge University Press & Assessment has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

To the extent permitted by applicable law, Cambridge University Press is not liable for direct damages or loss of any kind resulting from the use of this product or from errors or faults contained in it, and in every case Cambridge University Press's liability shall be limited to the amount actually paid by the customer for the product.

Every effort has been made in preparing this book to provide accurate and up-to-date information which is in accord with accepted standards and practice at the time of publication. Although case histories are drawn from actual cases, every effort has been made to disguise the identities of the individuals involved. Nevertheless, the authors, editors and publishers can make no warranties that the information contained herein is totally free from error, not least because clinical standards are constantly changing through research and regulation. The authors, editors and publishers therefore disclaim all liability for direct or consequential damages resulting from the use of material contained in this book. Readers are strongly advised to pay careful attention to information provided by the manufacturer of any drugs or equipment that they plan to use.

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

To our families
who continue to support us selflessly and
unreservedly in this and
all our personal and professional endeavors.

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

Contents

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

Contributors

Joëlle Adrien, PhD
Faculté de Médecine Pierre et Marie Curie
Site Pitié-Salpêtrière
Paris, France

M. Y. Agargun, MD
Yuzuncu Yil University School of Medicine
Department of Psychiatry
Van, Turkey

Negar Ahmadi, BSc
Toronto Western Hospital
Psychiatry Department
Toronto, ON Canada

Imran M. Ahmed, MD
Sleep-Wake Disorders Center
Montefiore Medical Center and
Albert Einstein College of Medicine
Bronx, NY USA

J. Todd Arnedt, PhD
Clinical Assistant Professor of Psychiatry
Sleep and Chronophysiology Laboratory
University of Michigan
Department of Psychiatry
Ann Arbor, MI USA

Joseph Barbera, MD, FRCPC, DABSM
Department of Psychiatry
University of Toronto
Medical Director
The Youthdale Child and Adolescent Sleep Centre
Toronto, ON Canada

Simon Beaulieu-Bonneau, MPs
École de psychologie
Pavillon Félix-Antoine-Savard
Université Laval
Québec, Canada

Marie E. Beitinger, MSc
Max Planck Institute of Psychiatry
Munich, Germany

Francesco Benedetti, MD
Istituto Scientifico Universitario Ospedale San Raffaele
Dipartimento di Neuroscienze Cliniche
San Raffaele Turro
Milano, Italy

Glenn Berall, BSc, MD, FRCPC, MBA
Chief of Paediatrics
North York General
Assistant Professor Department of Paediatrics and
Department of Nutritional Sciences
University of Toronto
North York General Hospital
University of Toronto
SickKids Hospital Paediatric Suites
Toronto, ON Canada

Kirk J. Brower, MD
Professor of Psychiatry
Executive Director
University of Michigan
Addiction Treatment Services
University of Michigan
Department of Psychiatry
Ann Arbor, MI USA

Gregory M. Brown, MD, PhD, FRCPC, FRSC
Professor Emeritus
Department of Psychiatry
University of Toronto
Oakville, ON Canada

Kumaraswamy Budur, MD
Staff in Sleep Medicine/Psychiatry
Cleveland Clinic
Assistant Professor
Cleveland Clinic Lerner College of Medicine

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

Case Western Reserve University
Cleveland, OH USA

Daniel P. Cardinali, MD, PhD
Professor of Physiology
Superior Investigator CONICET
Department of Physiology
Faculty of Medicine
University of Buenos Aires, Paraguay
Buenos Aires, Argentina

Deirdre A. Conroy, PhD
Clinical Assistant Professor of Psychiatry
University of Michigan Addiction Treatment Services
University of Michigan
Department of Psychiatry
Ann Arbor, MI USA

Sara Dallaspezia, MD
Istituto Scientifico Universitario
Ospedale San Raffaele
Department of Clinical Neurosciences
San Raffaele Turro, Milan, Italy

José Manuel de la Fuente, MD, PhD
Professor of Psychiatry
CHS Lannemezan
Lannemezan, France

Paolo De Luca
Behavior and Sleep Research Lab
Douglas Research Institute
Verdun, QC Canada

Diana De Ronchi, MD, PhD
Full Professor
Institute of Psychiatry
University of Bologna
Bologna, Italy

Antonio Drago, MD
Assistant Professor
Institute of Psychiatry
University of Bologna
Bologna, Italy

Matthew R. Ebben, PhD
Assistant Professor of Psychology in Neurology
Center for Sleep Medicine
Weill Medical College of Cornell University
New York, USA

Irshaad Ebrahim, MBChB, MRCPsych
The London Sleep Centre
London, UK

Pingfu Feng, MD, PhD
Assistant Professor of Medicine and Psychiatry
Division of Pulmonary
Critical Care and Sleep Medicine
Department of Medicine and Department of Psychiatry
Director for Research
Center for Sleep Disorders Research
Case Western Reserve University/VA Med, USA

Peter B. Fenwick, DPM, BA, FRCPsych
The London Sleep Centre
London, UK

Lina Fine, MD
Center for Sleep Medicine
Weill Medical College of Cornell University
New York, USA

Jonathan Adrian Ewing Fleming, MB, BAO, BCh, FRCPC, DABPN, DABSM
Associate Professor
Department of Psychiatry UBC
Co-Director, Sleep Disorders Program
University Hospital
Vancouver, Canada
Sleep Program
University Hospital,
Vancouver, BC Canada

Paul A. Fredrickson, MD
Department of Psychiatry and Psychology
Mayo Clinic College of Medicine
Jacksonville, FL USA

Stephany Fulda, Dip.psych
Max-Planck-Institut für Psychiatrie
München, Germany

Lucile Garma, MD, PhD
Service du Pr Willer
Fédération des Pathologies du Sommeil
Hôpital Pitié-Salpêtrière
Paris, France

Roger Godbout, PhD
Professor of Psychiatry
Faculty of Medicine
Université de Montréal

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

Sleep Laboratory and Clinic
Hôpital Rivière-des-Prairies
Montréal, Québec, Canada

Reut Gruber, PhD
Clinical Psychologist
Assistant Professor
Department of Psychiatry
McGill University
Douglas Research Center
Verdun, Québec, Canada

J. Allan Hobson, PhD
Professor of Psychiatry Emeritus
Harvard Medical School Professor
Department of Psychiatry
Beth Israel Deaconess Medical Center
Laboratory of Neurophysiology
Massachusetts Mental Health Center
Harvard Medical School
Boston, MA USA

Andrea Iaboni, DPhil, MD
Centre for Sleep and Chronobiology
Toronto, ON Canada

Anna Ivanenko, MD, PhD
Assistant Professor
Clinical Psychiatry and Behavioral Science
Feinberg School of Medicine
Northwestern University
Division of Child and Adolescent Psychiatry
Children's Memorial Hospital
Chicago, IL USA

Mayumi Kimura, PhD
Neurogenetics of Sleep
Max Planck Institute of Psychiatry
Munich, Germany

Milton Kramer, MD
Clinical Professor of Psychiatry
University of Illinois at Chicago
Chicago, IL USA

Christoph J. Lauer, PhD
Professor of Psychology
Zentrum für psychische Gesundheit
Klinikum Ingolstadt
Ingolstadt, Germany

Remy Luthringer, PhD, CEO
Forenap Pharma and Forenap FRP
Rouffach, France

Luis Fernando Martínez, BA
Department of Psychiatry
University of California San Diego
La Jolla, CA USA

Sara Matteson-Rusby, PsyD, CBSM
Sleep and Neurophysiology Research Laboratory
Department of Psychiatry
University of Rochester
School of Medicine and Dentistry
Rochester, NY USA

Robert W. McCarley, MD
Head of the Harvard Department of Psychiatry,
and Head of the Laboratory of Neuroscience,
VA Boston Healthcare System
Brockton, MA USA

Charles J. Meliska, PhD
Project Scientist
Department of Psychiatry
University of California San Diego
La Jolla, CA USA

Harvey Moldofsky, MD, Dip.Psych, FRCPC
Centre for Sleep and Chronobiology
Toronto, ON Canada

Charles M. Morin, PhD
École de psychologie
Pavillon Félix-Antoine-Savard
Université Laval
Québec, Canada

Sricharan Moturi, MD, MPH
Division of Child and Adolescent Psychiatry
Children's Memorial Hospital
Chicago, IL USA

Marie-Christine Ouellet, PhD
Recherche en traumatologie et médecine d'urgence
Hôpital de l'Enfant-Jésus du CHA
Pavillon Notre-Dame, Québec, Canada

James F. Pagel, MS, MD
Associate Clinical Professor
University of Colorado School of Medicine
Director Rocky Mountain
Pueblo, CO USA

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

List of contributors

S. R. Pandi-Perumal, MSc
President and Chief Executive Officer
Somnogen Inc.
New York, USA

Barbara L. Parry, MD
Professor of Psychiatry
University of California San Diego
La Jolla, CA USA

Timo Partonen, MD, PhD
Docent of Psychiatry (University of Helsinki)
Academy Research Fellow (Academy of Finland)
National Public Health Institute
Department of Mental Health and Alcohol Research
Finland

Wilfred R. Pigeon, PhD, CBSM
Assistant Professor of Psychiatry
University of Rochester Medical Center
Sleep and Neurophysiology Research Laboratory
Rochester, NY USA

Thomas Pollmächer, MD
Professor of Psychiatry
Zentrum für psychische Gesundheit
Klinikum Ingolstadt
Germany

Nathalie Pross, PhD
Clinical Psychologist
Forenap Pharma
Rouffach, France

Elliott Richelson, MD
Neuropsychopharmacology Laboratory
Mayo Clinic College of Medicine
Jacksonville, FL USA

Naomi L. Rogers, PhD
Chronobiology and Sleep Group
Brain and Mind Research Institute
Camperdown, NSW Australia

Stefan Rupprecht-Mrozek, MD
Department of Psychiatry
Memory Clinic
Vivantes Hospital Berlin-Spandau
Berlin, Germany

Philip Saleh, BSc
Toronto Western Hospital
Department of Psychiatry
Toronto, ON Canada

Andreas Schuld, MD
Associate Professor of Psychiatry
Zentrum für psychische Gesundheit
Klinikum Ingolstadt, Germany

Alessandro Serretti, MD, PhD
Associate Professor
Institute of Psychiatry
University of Bologna
Bologna, Italy

Colin M. Shapiro, MBBCh, PhD, MRC Psych, FRCP(C)
Toronto Western Hospital
Psychiatry Department
Toronto, ON Canada

Christopher Michael Sinton, PhD
Department of Internal Medicine
University of Texas Southwestern Medical Center
Dallas, TX USA

Marcel G. Smits, MD, PhD
Department of Sleep-Wake Disorders
and Chronobiology
Hospital Gelderse Vallei
The Netherlands

D. Warren Spence, MA
Sleep and Alertness Clinic
University Health Network
Toronto, ON Canada

Jürgen Staedt, PhD
Head of the Department of Psychiatry
Memory Clinic
Vivantes Hospital Berlin-Spandau
Berlin, Germany

Corinne Staner, MD, CDO
Forenap Pharma
Rouffach, France

Luc Staner, MD,
Head of the Clinical Research Sleep Unit
Forenap FRP and Centre Hospitalier
Rouffach, France

Axel Steiger, MD
Research Group Leader
Endocrinology of Sleep
Senior Psychiatrist
Department of Psychiatry

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

Max Planck Institute of Psychiatry
Munich, Germany

Deborah Suchecki, PhD
Universidade Federal de São Paulo (UNIFESP)
Departamento de Psicobiologia
São Paulo, Brazil

Michael J. Thorpy, MD
Director
Sleep–Wake Disorders Center
Montefiore Medical Center and
Professor
The Saul R. Korey Department of Neurology
Division of Sleep Medicine and Chronobiology
Albert Einstein College of Medicine
Bronx, NY USA

Inna Voloh, MD, RPsgT
Toronto Western Hospital
Psychiatry Department
Toronto, ON Canada

Bradley G. Whitwell
Chronobiology and Sleep Group
Brain and Mind Research Institute
University of Sydney
Sydney, NSW Australia

Robert A. Zucker, PhD
Professor of Psychology in Psychiatry
and Psychology
Director
Substance Abuse Section
Department of Psychiatry
Director
University of Michigan
Addiction Research Center
Ann Arbor, MI USA

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

Foreword

Sleep as a model for mental illness

Sleep is a normal state that contains within it another normal state, dreaming. Dreaming shares with so-called "mental" illness the formal properties of psychosis (hallucinations and delusions) and is, by definition, a delirium (because it manifests visual hallucinations, disorientation, memory loss, and confabulation). So sleep is at the very least a model for mental illness. But sleep is certainly more than a model because it makes us think about what mental illness may really be. In so doing, it makes some of us realize that the term "mental illness" is really a misnomer. If we were more critical and more philosophical, we would substitute a definition like "diseases of the mind, the brain basis of which is not yet known."

Practically all of the so-called mental illnesses discussed in this book fit this cumbersome definition. They are diseases of the mind, the brain basis of which is not yet known. But dreaming, that normal model of mental illness, has a brain basis that is becoming increasingly well known. And as its brain basis is better and better detailed, its distinctive mental manifestations are increasingly ascribable to an equally distinctive brain physiology. Thus we might suggest, not altogether facetiously, that dreaming is a brain–mind state whose psychological features are a direct expression of altered brain physiology. In other words, dreaming is a state of mind, the brain basis of which is now, in part, known.

If this is true (and I will publicly debate with anyone who says it is not true), then there is no such thing as mental illness without an underlying brain illness. That being the case, such a term as mental illness is a misnomer. We had better refer to diseases (or if you prefer, disorders) of the mind whose brain basis is not yet known and turn our attention to the scientific investigation of the brain in those conditions.

One way to begin such an enterprise is to study sleep and mental illness. This is just what is done in this book. Since we know a great deal about the brain basis of sleep, we may be in a position to infer the brain basis of mental illness from observed changes in sleep. Let us look at several examples.

It is already clear that the aminergic neuromodulators mediate waking and, in order to go to sleep – and especially to dream – we need to be able to inhibit them powerfully. This is true of serotonin, norepinephrine, and histamine. The release of these neuromodulators throughout the brain decreases at sleep onset and is completely shut off in rapid eye movement (REM) sleep. That may be why dreaming, the psychological (or mental) concomitant of REM sleep, so faithfully simulates organic delirium. Organic delirium, after all, is commonly associated with toxic conditions that interfere with aminergic neuromodulation. I am referring to conditions such as delirium tremens, amphetamine psychosis, and other drug-induced states.

Major affective disorders similarly show aminergic abnormalities akin to REM sleep. In depression, we find reduced REM sleep latency and increased REM P1 intensity and duration. Most theories of depression postulate diminished aminergic synaptic efficacy and many drugs that are used to treat depression enhance aminergic synaptic efficacy. At the same time, and in keeping with the sleep as mental illness model, cholinergic mechanisms are enhanced, in both depressive and REM sleep. So why is the depressive affect seen so seldom in dreaming? Possibly because REM sleep only lasts minutes whereas depression lasts for weeks, months, and even years. The downstream effects of the similar neuromodulatory profiles may be quite different.

What about schizophrenia? It is phenomenologically even more different from dreaming than major affective disorder. The hallucinations are usually auditory and less commonly visual; the delusions are commonly paranoid, a feature that is very uncommon in dreaming. The flat effect that is so common in schizophrenia is never seen in dreaming. And the

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

pathophysiology has little in common with dreaming. Most theories of schizophrenia focus on dopamine, an aminergic modulator that changes little in sleep. So, by the time we get to schizophrenia (usually at the top of everyone's list), we seem far away from dreaming.

But, wait. There is still the fact that both conditions represent mental aberrations. So we should not close the door on our analogy too quickly and we certainly should not slam it shut. Two caveats come to mind: (1) the role of dopamine in sleep has been less well studied than the roles of serotonin, norepinephrine, and histamine; and (2) the mechanism of action of atypical antipsychotics (such as clozapine) may be related to enhancing effects on the aminergic neuromodulators which are clearly sleep–wake efficacious.

The point of this foreword is to alert the reader to a strategic vantage point above the level of correlation appropriately taken by most of the chapters in this book. I am not saying that dreaming is a mental illness nor that mental illness does not exist. Instead, I am asserting that the proper scientific study of sleep considers it to be analogous to what we call mental illness, and those in sleep and dream science must strive to learn whatever we can about the brain's contribution to mental illness.

I am not arguing, either, for an eliminative materialism. That is to say, I recognize the contributions of problematical environmental surroundings to brain–mind health. And I certainly recognize the emotional salience of dreams, a salience that wise psychotherapists help their clients to appreciate. But I do seriously question what I consider to be the exaggerated emphasis on the psychogenic causation of dreaming posited by psychoanalysis. This is not the place to take up my cudgel again against Freudian theory, but its fate at the hands of neurobiology may be a warning of what is to come as we further explore the brain basis of so-called mental illness.

A major problem confronting us in our scientific quest is the absence of good animal models for the functional psychoses. Because all mammals have REM, our task is made considerably easier when we study the brain basis of dreaming. But we have no good animal models for major mental illness. What are we to do? One answer is to use the modern techniques for the study of the human brain for all that they are worth, and then some. Quantitative electroencephalography (EEG) and functional magnetic resonance imaging (fMRI) have already proven quite useful in discerning the brain underpinnings of such subtle mental states as lucid dreaming, which is distinctively different from both waking and dreaming (with both of which it shares features) so help may be on the way.

My introduction of the hybrid term brain–mind is meant to denote a step on the long road to a monism that never loses sight of the brain–mind nexus. In my crystal ball, brain is mind and mind is brain. They are two aspects of the same thing. Sleep, dreams, and what we now call mental illness are all functional states of the brain.

J. Allan Hobson
Professor of Psychiatry
Harvard Medical School

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

Preface

The idea for the first edition of this volume entitled *Sleep and Mental Illness* occurred to us when we published our earlier volume entitled *Sleep and Psychosomatic Medicine*. Mental disturbance is extremely common among those who suffer from sleep disorders. Despite the fact that a number of quality publications (including our own) exist on this increasingly popular research and clinical topic, each has certain gaps in coverage. We thus felt a need to address this deficiency by compiling one of the most comprehensive volumes ever published on sleep and mental illness. It has been an honor and privilege to edit this volume and to ensure that the necessary topics have been covered appropriately.

This volume is organized into three sections encompassing core topics in both sleep and mental illness as follows.

Section 1 provides up-to-date background information on the basic science of this area of investigation. The topics included in this section are the neuropharmacology of mental illness, the effects of antidepressants on gene expression, and the neurochemistry of sleep. Other topics include the neuropharmacology of depression and animal models of sleep and stress. Also covered are chapters dealing with the relation between depression and insomnia and associated changes on levels of orexin in the brain.

Section 2 covers the neuroendocrinological changes that are seen in pathophysiological states. These include the effects of disturbed sleep and depression on hormone secretion, sleep–endocrine relationships in depressed women across the reproductive cycle, and the relationship between melatonin and mental illness.

Finally, in **Section 3**, a series of clinical science topics relating to sleep and mental illness is presented. The range of clinical topics covered here represents the largest section of this volume. Starting with the International Classification of Sleep Disorders, this section addresses topics such as insomnia and the associated risk for developing psychiatric illness in the future, antidepressant-induced alterations in sleep EEG, long-term effects of antidepressants on sleep, sleep during antipsychotic treatment, sleep and substance use and abuse, cognitive effects of psychoactive medications, and sleep-related memory consolidation in mental illness. Other topics include fatigue and sleepiness in affective illness, sleep in attention-deficit/hyperactivity disorders, sleep in seasonal affective disorder, and sleep in traumatic brain injury. This section also covers sleep and borderline personality disorders, sleep and eating disorders, sleep in late-life depression, and forensic issues of sleep in psychiatric patients.

This is an exciting time for specialists in both sleep and psychiatry. We have many reasons to be optimistic that significant progress is being made in the understanding, prevention, and management of sleep disorders. Our growing understanding of the pathogenesis and pathophysiology of mental illness, coupled with the rapidly expanding field of sleep medicine, has also seen the growth of an increasing number of successful management strategies. It is our hope that this volume will have a positive effect on the care of patients, especially those who present with comorbid conditions in current clinical practice.

The advent of sleep medicine has brought with it new perspectives on mental illness, and in particular a growing awareness that problems with sleep can both exacerbate and portend the development of mental disturbance in the future. Additionally, the impairment of the role of dreaming in affect regulation may be central to understanding the mood changes in depression. What this has meant is that psychiatrists are now discarding some long-cherished prescribing practices such as an increasing trend toward prescribing sleeping aids in addition to antidepressants.

Multidisciplinary care and a team approach are the best foundations for the effective practice of sleep medicine. It seems that the best approach to

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

comorbid sleep disorders is to involve a variety of experts in consultation as needed. This team approach should include consultations with psychiatrists, psychologists, behavioral sleep medicine professionals, and other sleep specialists. The management of comorbid insomnia symptoms in psychiatric patients can benefit greatly from the specialized knowledge of sleep professionals. It is the hope that advocacy of interdisciplinary care will promote excellence in the treatment of sleep disorders in mentally ill patients.

This volume is intended to be a resource for practitioners responsible for the care of sleep patients with mental illness and vice versa. That being said, this volume is appropriate for psychiatrists, psychologists, sleep specialists, and generalists alike. It can be useful for medical graduate students of biomedical and sleep medicine subspecialties. It will be also be of wide interest to others who want to get an overall grasp of sleep pharmacology and therapeutics and those physicians who evaluate and treat sleep disorders. In addition, the volume will be useful to clinicians of various disciplines who want to gain an overview of sleep psychiatry. This volume may serve as a reference work that will be of value to scientists and students alike. Since sleep disorders are almost ubiquitous in clinical practice, we hope that you will find this material relevant and useful.

This volume includes contributions from a wide range of authors, many of whom are recognized internationally as authorities in their field. Overall, the reader may feel confident that the information presented is based on the old as well as most recent literature. Some of the information presented in this volume on older sedative hypnotics will be familiar to informed readers and will demonstrate to them how their previously acquired knowledge can be applied to the treatment of sleep disorders. Information about specific drugs may also be repeated in various chapters throughout this volume by very many authors. Inasmuch as repetition is the mother of learning, it is hoped that this redundancy will be construed as a benefit. The editors and authors would appreciate feedback on the contents of the volume with particular regard to any omissions or inaccuracies, which will be rectified in later editions. We also welcome your ideas, comments, and constructive criticisms, which are always appreciated.

S. R. Pandi-Perumal, New York, USA
Milton Kramer, Chicago, USA

© in this web service Cambridge University Press & Assessment www.cambridge.org

CAMBRIDGE
Cambridge University Press & Assessment
978-0-521-11050-1 — Sleep and Mental Illness
S. R. Pandi-Perumal , Milton Kramer
Frontmatter
More Information

Acknowledgments

The editors owe endless gratitude to, and wish to express their sincere appreciation to all of our distinguished contributors for their scholarly and diligent contributions that form the basis of this volume. Producing a volume such as this is a team effort and we acknowledge with gratitude the work of the editorial department of Cambridge University Press, England. We are especially indebted to Mr. Nicholas Dunton, commissioning editor of neurology, who was an enthusiastic and instrumental supporter from start to finish. Our profound gratitude is offered also to Ms. Katie James, editor, whose equally dedicated efforts promoted a smooth completion of this important project. Their commitment to excellence was a strong guiding force throughout the development of this volume. We were fortunate to experience warm, professional, and highly enthusiastic support from the wonderfully talented people at Cambridge University Press who made this project a pleasurable one.

There are many to thank for a book that has been based on contributions from so many different disciplines. To have found over 70 authors with a desire to contribute to the first edition could not have occurred without a tremendous concentration of effort and teamwork. Our publishing authors gracefully fulfilled our many requests, met our deadlines, and delivered their manuscripts accordingly, for which we are deeply grateful. We sincerely thank them for working with us through this long process. A number of individuals made outstanding contributions. A very special appreciation is also owed to several reviewers who made numerous helpful suggestions. Their candid comments and insights were invaluable.

Finally, we express our gratitude to our families for their patience and support. Their constant encouragement, understanding, and patience while the book was being developed are immeasurably appreciated.

S. R. Pandi-Perumal, New York, USA
Milton Kramer, Chicago, USA

© in this web service Cambridge University Press & Assessment www.cambridge.org