Disorders of Brain and Mind

*Disorders of Brain and Mind* is an excellent resource text for students, clinicians, and researchers in the fields of psychology, neurology, and psychiatry. The text begins with a review of the neurophysiology of the frontal lobes. After this background, there is a comprehensive discussion of the potential neuropsychological sequelae of frontal lobe damage. Overall, the discussion of frontal lobe functioning and how symptoms consistent with frontal lobe dysfunction are seen in patients with schizophrenia is excellent. The authors acknowledge, however, that frontal lobe dysfunction, in and of itself, cannot explain the full spectrum of schizophrenic symptoms.

The text also reviews some of the cognitive deficits in patients with basal ganglia diseases and notes how these deficits resemble those executive deficits that follow frontal lobe damage. These cognitive deficits appear to result from disruptions of highly organized corticostriatal anatomical “loops.” The discussion of the frontosubcortical circuitry helps the reader understand why patients with various neurodegenerative disorders develop neuropsychiatric symptoms.

The chapter on dopamine and its role in contributing to the development of schizophrenia is thought-provoking. Is the dopamine theory of schizophrenia still alive? This chapter reviews the link between dopaminergic dysfunction, schizophrenia, and cognitive dysfunction. The reader will be convinced that dopamine neurotransmission plays a significant role in cognitive function, motor activity, and motivational behavior, all of which have been reported to be abnormal in schizophrenia. Nonetheless, the question still remains as to whether these symptoms are secondary to dopamine dysfunction in schizophrenic patients.

There is an unbiased review of the conflicting neuroimaging data. The fact that severe psychotic symptoms can be seen in patients with structurally normal brains, plus the fact that gross brain pathology may occur without psychiatric symptoms, points to the need for more functional anatomical studies rather than pure structural studies. The text also has an excellent review of the neuropsychology of memory, the neuroanatomy of the amnesic syndromes, and the “schizophrenic-like” psychosis associated with epilepsy. This is followed by an insightful discussion of the association between birth trauma, genetics, fetal abnormalities, viral infections, and neurodevelopmental disturbances and their possible role in the development of schizophrenia. The discussion of the neurodevelopmental etiology of schizophrenia is well-balanced. The appearance of neurobehavioral and neuromotor abnormalities before the onset of overt schizophrenic symptomatology provides strong support for a genetic or neurodevelopmental disease model.

*Disorders of Brain and Mind* is a noteworthy review of functional neuroanatomy for the neuropsychiatrist, neuropsychologist, and neurologist. It examines various neuroanatomical brain circuits and correlates clinical findings (cognitive and behavioral symptoms) with structural damage. The text also reviews for the reader key biochemical, structural, and cognitive data on schizophrenia and several neurologic disorders. Overall, this multidisciplinary examination of current neuropsychiatry is a valuable reference text for students and practitioners alike.

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Group Psychotherapy for Psychological Trauma

*Group Psychotherapy for Psychological Trauma* is an excellent resource text for students, clinicians, and researchers in the fields of psychology, neurology, and psychiatry. The text begins by reviewing the normal neurophysiology of the frontal lobes. After this background, there is a comprehensive discussion of the potential neuropsychological sequelae of frontal lobe damage. Overall, the discussion of frontal lobe functioning and how symptoms consistent with frontal lobe dysfunction are seen in patients with schizophrenia is excellent. The authors acknowledge, however, that frontal lobe dysfunction, in and of itself, cannot explain the full spectrum of schizophrenic symptoms.

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Michael H. Ebert, M.D., Editor
hellessness and lack of control over life’s choices, as well as the dissolution of what was once safe and predictable, are indications of trauma. Also indicative of trauma is the sense of being different from others, which can be a marker for the beginning of isolation (p. 189). Marcus and Bernard discuss and contrast 3 basic models of group interventions for people with prolonged and/or severe illness: education, support, and psychotherapy. Although all chapters in this section provide thoughtful discussions on group models for specific populations, there is minimal empirical validation offered by the authors (Johnson and Lubin’s chapter “Group Psychotherapy for the Symptoms of Posttraumatic Stress Disorder” being a rare exception) for the effectiveness of the group approaches presented.

This book is ambitious in its scope, but generally able to meet the challenge. The thought-provoking chapters written by talented, experienced clinicians provide a theoretical and treatment source for an extremely important area. What then is missing from this compendium? First, with few exceptions, contributors fail to provide a scientific verification that trauma groups really work for the specialized population about which they are writing. In an era in which empirically supported treatments are receiving considerable attention from the mental health professions and third-party payers, there is every reason to document the effectiveness of one’s clinical work. This should apply to trauma group leaders as well. Second, this reviewer found the book ended abruptly. I would have liked an integrative final chapter (e.g., Conclusions chapter) written at the level of the editors’ scholarly introductory chapter to the volume. Nevertheless, Klein and Schermer can be justly proud of producing a very thoughtful and informative book.

The volume’s instructive chapters cover a remarkable range of topics, with each having the central focus of group trauma work. The book is scholarly enough to be used as a primary resource by experienced clinicians and, at the same time, basic enough to be helpful to trainees of all mental health professions involved in trauma work. It will hopefully also serve as a stimulant for group therapy researchers interested in studying the process and outcome of trauma groups.

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Rapid Eye Movement Sleep
edited by Birendra Nath Mallick, Ph.D., and Shojiro Inoué,
D.Sc. Marcel Dekker, Inc., New York, N.Y., 1999,
419 pages, $145.00.

Comprehensive reviews of complex neuroscience topics are not on a typical reading list for the practicing psychiatrist, but sometimes it’s worth looking behind the window-dressing of our clinical world to explore the basic science that explains some of our questions “Why?” Why do some patients experience intensification of dreams, or disruptions of slow-wave sleep, or daytime somnolence? Why does the same drug seem to have opposite sleep effects in different patients? What is sleep, anyway?

Seemingly credible answers to these perennial questions from patients and clinicians generally appear to generate conflicting or at least confusing views when brief reviews appear. Fortunately, most medications have predictable effects on sleep, but the effects are not always so clear, especially with antidepressants. Reviews collected in the present volume offer a structured reading of a large literature that would be otherwise unapproachable. The focus is on neurobiological mechanisms, not on clinical syndromes or disease entities. The good news is that many studies of transmitter systems show specific effects on specific measures of sleep. The bad news, though, is that the book brings no simplicity to extremely complex interactions between transmitter systems and the persisting enigmatic nature of an ancient mystery: dreams. We are left to answer our patients with more questions than with clear predictions.

After an enticing historical foreword by Michel Jouvet (who first found REM sleep in cats) and an introductory chapter by Eugene Aserinsky (who first reported REM sleep in humans), Rapid Eye Movement Sleep lists 27 more chapters that progress from basic concept definitions, studies in embryonic preparations, and an anatomical precis, through preclinical small mammal and primate data on transmitters involved in REM regulation, and then to findings in man, including apnea effects and REM deprivation studies in depression. The chapters are each written by experts in the topic and cover the topics evenly and almost exhaustively. Although the topics deal with state-of-the-art experimental methods and interpretations, the chapters introduce them as for a neophyte, making the book accessible to even an armchair clinician-scientist.

There are a few shortcomings, the most serious of which is the absence of a subject index. A collection of this importance deserves an index, especially for a nonresearcher who might select this book in order to read about one specific drug, receptor, or brain region. Future editions might benefit from chapters on sleep disorders, which would be a fascinating addition for clinicians, especially given new findings in the pathophysiology and genetics of narcolepsy. The early chapters are poorly edited, with fewer errors occurring later in the clinical sections. References are sometimes incomplete. This doesn’t detract from the scientific content or validity, but forces the reader to work harder with a topic that is already fraught with enough difficulty. The edition appears to have been penned in 1997 and 1998, as most articles reference sources that were published no later than 1997. The appearance of the book in 1999 suggests that the editing time was minimized successfully in order to keep the material current at the time of publication.

Fifty years of research (since the discovery of the reticular formation) is reviewed admirably in these pages. It becomes possible to begin an understanding of sleep processes by reading this work. For a very curious clinician who wants to be aware of the history of how we know what we do, is looking for a compilation of recent research findings, and is already asking the next questions to be addressed, this is a wonderful book. For most, though, it lacks direct clinical relevance and presents too much detail. There are more digestible offerings that would be a better first introduction to the vagaries of sleep and dreams such as the Borbély classic, which is written with a style that keeps you awake. Rapid Eye Movement Sleep requires more effort from the reader, but delivers a more rewarding, more scholarly, and more comprehensive summary of the state of this art.

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